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REPORT OF THE COMMITTEE ON WAR FINANCE

The committee on war finance was constituted in the spring of 1918. It consisted of the following members:

H. C. ADAMS, University of Michigan.
C. J. BULLOCK, Harvard University.
F. R. FAIRCHILD, Yale University.
H. B. GARDNER, Brown University.
J. H. HOLLANDER, Johns Hopkins University.
E. W. KEMMERER, Princeton University.
A. D. NOYES, The New York Evening Post.
C. C. PLEHN, University of California.
W. A. SCOTT, University of Wisconsin.
O. M. W. SPRAGUE, Harvard University.
H. PARKER WILLIS, Columbia University.
E. R. A. SELIGMAN, Columbia University, *Chairman*.

Professor Sprague was unable, because of the stress of governmental work, to attend any of the meetings and resigned shortly after the formation of the committee. He was replaced by Professor R. M. Haig, of Columbia University. Professor Adams attended the first meeting of the committee but found it impossible to devote any time to its deliberations and therefore resigned. He was replaced by Professor E. L. Bogart, of the University of Illinois. Professor Scott was unable to attend any of the meetings of the committee, but has approved of the findings. Professor Plehn was also unable to attend the meetings, but participated in the work of several sub-committees.

At its constituent meeting, the committee decided to limit its activities to a consideration of public revenues, public credit and the currency problem, so far as the fiscal necessities of the government were concerned. It was recognized that the topic of governmental expenditure was at the time too vast to lend itself to a satisfactory treatment by the committee; and it was also felt that the time was inopportune for an immediate study of the budget. The committee therefore resolved itself into five sub-committees. To one of them was assigned the subject of government credit, to another the fiscal aspects of bank credit and

currency. The question of revenue from taxation appeared to be so important that three sub-committees were assigned to this topic; one to consider the income and excess-profits taxes; another to study the practicability of taxes on land and capital; and a third to deal with taxes on consumption and the other indirect taxes. The chairmen of the five sub-committees were as follows:

Income and excess-profits taxes	Professor Bullock
Consumption and other indirect taxes....	Professor Gardner
Land and capital taxes	Professor Fairchild
Public credit	Professor Bogart
Fiscal aspects of credit and currency....	Professor Kemmerer

All of the members of the general committee, with the exceptions noted above, served on one or more of the sub-committees.

It was soon apparent that any adequate study of the operation of the income and excess-profits taxes would call for a far more elaborate machinery of investigation than would be possible for the individual members of the sub-committee. A number of members and friends of the Association were prevailed upon to provide the funds for these more elaborate investigations and a sum of between twenty-five and thirty thousand dollars was raised for this purpose. During the summer an extensive series of returns from various classes of business concerns were secured by a carefully selected field force and were arranged and analyzed by an office force under the direction of Professor Bullock. The report of the committee is largely based upon the conclusions of this field investigation, while in all the legal questions involved the committee has enjoyed the active co-operation and advice of Mr. Clement R. Lamson, of Boston, and of Mr. George E. Holmes, of New York. It had also been arranged to send a special commission to Europe to study the workings of the excess-profits taxes in Great Britain and in France, but various difficulties connected with the securing of passports finally resulted in the abandonment of this project. While it would have been desirable to have a similar extensive basis for the work of the other sub-committees, this proved to be impracticable.

The original objects which the committee set itself to achieve were two in number, scientific and patriotic. The primary object of the committee, as representatives of a scientific Association, was to make a critical study of what had happened and what was happening in order that the results of such an investigation might become a permanent part of the scientific treatment of the subject

and might help to elucidate the validity of the general principles underlying the actual development. No less important, however, in the minds of the committee, was the patriotic aim;—the hope, namely, of being able through an analysis of what was happening to formulate some constructive suggestions as to what ought to be done in the future and thus to help in the creation of those conditions which might be of influence in winning the war.

The dramatic changes in the situation which supervened in November, when the draft report of the committee was virtually completed, necessarily affected the character of the final report. The first of our objects, namely, that of the scientific presentation and critical estimate of the actual fiscal events remains, indeed, unaltered; and this still forms the chief content of the present report. But now that the armistice has been arranged and the end of the war is in sight, the problem, so far as the future is concerned, becomes in large part one of readjustment or transition finance—a finance, namely, that is desirable during the period of transition from war conditions to peace conditions, from an abnormal to a normal situation. While your committee is of the opinion that the subject of normal or peace finance is beyond its purview, it believes that the problems of the finances of transition or readjustment properly fall within the scope of its activities, since the transition period is a direct consequence of the war activities. A study of war finance ought in other words to include a study of those conditions directly attributable to the war.

We have consequently included in our report some suggestions as to what is desirable during the post-war or transition period. In doing this, however, we have limited ourselves to the more important points and have left a fuller consideration of this subject, as well as of the future peace finance, for later study by a subsequent committee, if the Association should think it advisable to pursue the matter further.

We proceed, therefore, to discuss the general subject under five heads, corresponding to the five sub-committees. While the discussion of each topic is primarily the work of the chairman of the sub-committee, it is to be noted not only that the members of each sub-committee collaborated in the preparation, but also that each contribution has been considered and revised by the committee as a whole.

I

THE FEDERAL INCOME AND EXCESS-PROFITS TAXES

One of the most important features of American financial policy during the present war has been the very large reliance placed upon income and excess-profits taxes. For the fiscal year 1918 the receipts from these sources were approximately \$2,840,000,000, which was over 73 per cent of the total income derived from taxation. From the fiscal point of view, at least, the income and excess-profits taxes were conspicuously successful in 1918; and it is evident that they were the mainstay of our war finances.

The reasons for the preponderant resort to these taxes are both clear and familiar. In the spring of 1917 there developed a strong popular demand that the war should be financed, as largely as practicable, by taxation and with the least possible resort to loans. It also proved that the kind of taxation generally favored was direct taxation of incomes and business profits, and that indirect taxation found little popular support. Further discussion of this subject is unnecessary for the purpose of this report and may well be postponed until after the war. It is sufficient at this time merely to point out that both political and other conditions made it natural and almost inevitable for Congress to minimize indirect taxation and resort chiefly to direct taxes upon incomes and business profits.

1. The Income Tax

The War Revenue Act of October 3, 1917, provided for an income tax of exceedingly complicated structure. Upon an ordinary income tax consisting of a normal tax of two per cent and a super-tax with progressive rates ranging from one to thirteen per cent on incomes in excess of \$20,000, it superimposed a war income tax consisting of a normal tax of two per cent and a super-tax with progressive rates ranging from one to fifty per cent on incomes in excess of \$5,000. Moreover, the exemptions granted to small incomes under the war tax differed materially

from those allowed under the ordinary income tax. The result was a complicated law which required the taxpayer to fill out a difficult return and increased considerably the trouble and expense of complying with the act. Simplification of structure is urgently needed, and it is gratifying that the revenue bill pending in Congress at the time this report is written proposes to simplify the tax by doing away with the cumbersome distinction between ordinary and war income taxes and levying but one normal tax and one super-tax.

An important feature of the Act of 1917 was that it reduced the exemptions granted under the normal income tax. There may have been, and probably were, in 1913, valid reasons for fixing the exemptions at \$3,000 and \$4,000, for unmarried and for married persons, respectively. But these exemptions were higher than could be justified after the income tax had surmounted the initial administrative difficulties and had come into fairly successful operation. The structure of the normal income tax, therefore, was materially improved when the exemptions allowed under the war tax were reduced to \$1,000 and \$2,000 respectively; and the pending revenue bill wisely places the exemptions at the same figure. When the war ends, it is important that these exemptions should not be materially increased since it is undesirable that, under either an income or a property tax, the duty of contributing to the support of government should be enforced upon only a small fraction of the population.

The rates of two and four per cent, imposed by the normal tax under the Act of 1917,¹ were moderate for a time of war, and the pending bill proposes to establish a normal rate of twelve per cent with a provision by which the rate upon the first \$4,000 of taxable income shall be six per cent. These rates are not unreasonably high under the circumstances, but it is unfortunate that the structure of the normal tax should be complicated by the imposition of two rates. If the desire to make a market for Liberty bonds, or some other controlling consideration, made it advisable to bring the rate of the individual tax up to twelve per cent without, however, imposing the full rate upon smaller individual incomes, the provisions of the law can be readily understood. But it is to be hoped that, as soon

¹ The corporation income tax imposed a rate of six per cent upon net incomes of corporations, and also a tax of ten per cent upon undistributed net income not retained for the reasonable requirements of the business.

as practicable, Congress will establish a single rate for the normal income tax and differentiate between smaller and larger incomes only in connection with the super-tax.

The rates imposed by the super-tax reached very high figures under the Act of 1917, rising to sixty-three per cent upon increments of income in excess of \$5,000,000. Their severity was tempered, however, by the extensive exemptions granted to incomes derived from federal, state and municipal obligations. The net result has been a progressive tax, the amount of which has depended not wholly upon the size of an individual's income, but to a considerable extent upon the character of his investments. Assuming that a progressive tax upon large incomes is just, it is clear that the rates imposed should depend upon the size of an individual's income; and results both farcical and inconsistent with the theory of progression ensue when rates vary with the kind of investments which a taxpayer has already made or may hereafter elect to make.

The rates levied upon larger incomes are so high as to cause serious hardship in certain cases, the more so since they are in addition to the very heavy rates imposed by the excess-profits tax.¹ Where the returns in any line of business fluctuate greatly from year to year, a tax of fifty per cent levied upon income realized in good years may, if continued in operation, consume all the profit derived from operations extending over a series of years. If an excess-profits tax takes half the net income from a business and the income tax takes half of the remaining income, not a few taxpayers will face certain ruin if the laws are strictly enforced. The same thing will occur when extensive commitments, financed with borrowed money, have been made prior to 1917 under arrangements by which the greater part of the prospective profits was expected to be used for extinguishing debts and otherwise reducing the commitments. When it is a matter of developing natural resources, taxes of such an amount obviously destroy all pecuniary inducement and may lead to a decision to postpone development until after the war. Cases have come to our attention which illustrate all these points, but it is manifestly difficult for an unofficial body to secure detailed information concerning them or to determine how frequently they

¹ In computing net income subject to the income tax, the amount of the excess profits tax may be deducted. This provision has reduced the number of hard cases, but has not prevented them from arising.

have occurred or how important they are in the aggregate. One taxpayer having large commitments in 1917, has been obliged, at great loss, to dispose of certain properties in order to save the remainder, and this at a time when his total profits were larger than ever before. Another who, during several years prior to 1917, had invested considerable capital in the development of mineral enterprises, "cleaned up" a profit of several million dollars early in 1917. Not knowing what revenue legislation Congress was to enact in the fall of that year, he reinvested a large part of his profits in other mineral properties which he expected to develop; and then found himself, at the opening of 1918, without any considerable amount of ready money but with a prospective tax bill calling for several millions. He had the option of selling his new properties at a forced sale entailing heavy losses, in order to pay a tax upon profits which in great part would be lost by the forced sale, or of throwing himself upon the mercy of the government which would be obliged either to ruin him or to disregard the plain provisions of the law. In another case taxable profits, which at the end of 1917 were represented largely by a swollen inventory based upon inflated prices, were lost in the first half of 1918 by a decline in the value of the inventory. The law of 1917 provided no legal method of dealing with such cases, and the new revenue act should certainly supply one. With the present heavy rates of taxation it is clearly necessary to confer upon the Treasury department wide discretionary powers. Such discretionary administration of tax laws would in ordinary times be undesirable, but at present it appears to be a necessity. The very need of granting such powers throws an interesting light upon the whole question of the taxation of war incomes and profits.

The income-tax laws successively enacted since 1913 have steadily improved the definition of taxable income, which, as formulated in the original law, left much to be desired. Further improvements seem likely to be made by the pending bill which, however, has not yet reached its final form. The points at which improvement is possible and desirable are as follows:

1. Taxpayers should be permitted to deduct losses sustained in any transaction entered into for profit, even though such transaction is not connected with any trade or business. Hitherto people have been taxed on gains resulting from such transactions but have been refused full allowance for losses.

2. The arbitrary limitation hitherto imposed upon corporations in respect to deductions allowed for interest paid on indebtedness ought to be removed. In the corporation income tax of 1909 there was justification for some such limitation, because there was then no personal income tax which would reach bondholders and, without some limitation, corporations could have reduced their taxes greatly by financing future requirements through the issue of bonds. When, however, the individual income tax was established in 1913, the justification for limiting a corporation's interest deduction disappeared because thereafter a tax would be levied upon the income from bonds or other corporate obligations.

3. A problem not yet solved is that of debt deduction allowed to individuals and corporations deriving income from non-taxable securities. Until 1917 individual taxpayers could deduct all interest paid upon their indebtedness, even though the money borrowed was invested in securities the income from which was exempt from taxation. Realizing what opportunities the unrestricted interest deduction offered for the avoidance of taxation, the Act of 1917 provided that individuals should not be allowed to deduct interest paid on indebtedness incurred for the purchase of tax-exempt obligations or securities. This limitation is obviously only partially effective on account of the difficulty of determining whether particular loans are for the purpose of making taxable or non-taxable investments. The revenue bill reported to the House of Representatives limited the interest deduction allowed to both individuals and corporations to the amount by which the interest paid on indebtedness exceeded the interest derived from non-taxable securities. But this provision was subsequently removed; and, even if it had been retained, it would not have met the requirements of the case. Yet it seems clear that a real problem exists, and that some day a satisfactory solution must be found, since taxpayers ought not to be able to reduce the amount of their income taxes by purchasing non-taxable securities with borrowed money. We face here one of the many undesirable results of creating large and increasingly important classes of tax-exempt securities. The best course would undoubtedly be to reverse, so far as practicable, our entire policy in the matter of exemptions. Until this is done, however, the only remedy likely to prove reasonably satisfactory is to limit interest deduction of an individual or a corporation to an amount which shall bear the same proportion to the total interest

paid upon indebtedness which the income derived from taxable sources bears to his total income from all sources. This would mean that a person deriving one-half of his income from non-taxable investments would be allowed to deduct one-half the interest he pays upon all his indebtedness—a solution which would be as nearly fair to both taxpayers and the government as the circumstances of the case permit.

4. The proceeds of life-insurance policies paid to the estate of a decedent should be excluded from the definition of taxable income in order to avoid the present flagrant discrimination between policies payable directly to beneficiaries and those payable to a decedent's estate. This the pending revenue bill proposes to do.

5. The heavy rates now levied on incomes and excess profits make it desirable to provide adequately for amortization of plants and equipment acquired since the outbreak of the war for the expansion of essential industries. Scarcely less necessary, also, is provision for losses occasioned by shrinkage in the value of inventories after the war. Unless these things are done great hardship may arise in lines of industry which have difficulty in readjusting themselves to peace conditions. Even in 1918 cases arose where profits made in 1917 were lost through the subsequent shrinkage of inventories, and we shall be fortunate if we avoid a large number of such cases in 1919. The pending bill proposes to grant certain allowances for amortization of plant or equipment and for losses realized in 1919 through shrinkage of inventory values used in computing the tax of the year 1918. Unless our war taxes are to be levied upon estimated income that will never be realized, Congress should make liberal provision for shrinkage in the value of plants and inventories.

6. Since 1913 corporations have been subject to double taxation of dividends received from the stocks of other taxable corporations. This was possible, although unjustifiable, when the rate of the income tax was only one or two per cent; but in 1917, when the rate imposed upon corporations was increased to six per cent, provision was made by which dividends derived from the stock of other taxable corporations would be doubly taxed only at the rate of two per cent. The pending bill proposes to do an act of simple justice by permitting corporations to deduct from their taxable income the whole amount of such dividends.

Whether the federal income tax should differentiate between

funded and unfunded incomes is a question which has been much discussed since last spring. Under the circumstances it is perhaps just as well that the pending bill does not undertake such differentiation. The administrative difficulties involved would be very great and the Treasury department now has more work on its hands than can be performed in a thoroughly satisfactory manner. Whether, when normal conditions return, the income tax should differentiate between funded and unfunded incomes is a question upon which it is best to reserve decision.

Certain administrative changes which have long been needed are incorporated in the pending bill. One of these is the provision by which individual taxpayers are granted the privilege of accounting upon the basis of fiscal, rather than calendar, years. Another is the establishment of a reasonable and practicable method by which taxpayers may secure refunds of taxes paid in excess of the amounts actually due the government. The existing arrangements are unbusinesslike, vexatious and discreditable to the United States. The process of securing refunds is so slow, uncertain, and expensive that it is not worth while to attempt to secure the return of small sums; while in all cases the loss of interest is involved. If, in order to avoid such delay and loss, a citizen protests the payment of a tax, he encounters various technical difficulties and incurs risk of serious penalties. Another step in advance is the provision by which it is proposed to place a limit of five years upon the time within which the government may institute proceedings for the collection of an income tax. At present it is impossible for any taxpayer to be sure that his best efforts have enabled him to ascertain and pay the amount of income tax due in any year since 1913, while corporations have no certainty that they have settled their taxes for the year 1910. Our income-tax laws have been badly drafted and very obscure at many points, local revenue officers have often given conflicting opinions, the Treasury department has frequently reversed its rulings, and retroactive investigations under changed rulings have resulted in demands for additional taxes on account of former years. In this respect the United States income tax has been exceedingly uncertain and vexatious, and it is undoubtedly time for a statute of limitations. The proposed limit of five years is probably too long, at least for normal times; except in case of fraud, the limit should ultimately be reduced to two or three years.

The high rates now levied upon incomes subject to the super-tax have greatly intensified an inequality which had existed since 1913 but was comparatively unimportant prior to the present year. Individual proprietors and members of a partnership are required to account to the government each year for the whole amount of the income resulting from the conduct of a business enterprise, and in respect of such income are subject to the super-tax if their total incomes exceed the stated figure. Upon the other hand the profits of a corporation become subject to the super-tax only to the extent that they are actually distributed to stockholders, so that the undistributed earnings are liable only to the normal income tax. The Act of 1917 sought to reach the difficulty by imposing a special tax of ten per cent upon corporation profits accumulated beyond the reasonable requirements of the business; but it exempted any part of such undistributed profits that was invested in certain obligations of the United States. Since any corporation that was expanding its operations and therefore required additional capital, as well as any that had debts which could be paid or available funds that could be invested in government obligations, could not be required to pay the tax, it proved that this provision of the Act of 1917 was of little effect. The Ways and Means committee, therefore, proposed to incorporate in the pending bill a provision imposing an additional tax of six per cent upon all undistributed corporation income except such as might be devoted to the discharge of bonds or other interest-bearing obligations outstanding at the opening of the taxable year. But the proposed remedy was open to so many objections that it was subsequently eliminated. It would have penalized companies which, when borrowing money, had obligated themselves to maintain a stated proportion between the amount of their liquid assets and the amount of their outstanding obligations, as well as those which, for good and sufficient reasons, had agreed to pay no dividends upon the common stock until their debts had been wholly extinguished or certain other conditions had been fulfilled. During 1918, moreover, not a few concerns were obliged to increase their loans in order to pay their war taxes, and in many such cases banks had required them to reduce or to suspend dividends. The difficulty is deep-seated since it arises from a natural and inevitable difference between the methods by which incorporated companies carry on business and those followed by unincorporated concerns.

It might be possible to allow the latter to set up reserves for various purposes, in respect of which the individual proprietors or partners should not be liable for assessment under the super-tax; but such a provision would present many administrative difficulties and would probably be found impracticable. Under an income tax, there seems to be no remedy that is not as bad as the disease, or even worse; and it is probable that we here face one of those unavoidable limitations to which this tax, like any other, is subject.¹

The unusual conditions resulting from the war and the prevailing high rates of the income and excess-profits taxes have given rise to difficult problems in connection with gains realized from the sale of capital assets or from the receipt of insurance money greatly exceeding the value at which such assets had been carried upon a taxpayer's books. The most striking instances have arisen in connection with the purchase of ships by the government or the receipt of insurance money for vessels lost at sea. At the current high values easily realized for this kind of assets, certain companies have received purchase or insurance money enormously in excess of the depreciated value at which well managed concerns would carry their ships. Under previous rulings, in themselves perfectly reasonable and proper for normal times, certain companies would have been required to pay income and excess-profits taxes that would have had the effect of practically confiscating part of their fleets, since they would be left with funds insufficient to replace the vessels sold or lost at sea. It is understood that the Treasury has authorized the opening of suspense accounts which will be adjusted whenever the vessels are replaced, in such a manner as will prevent hardship from arising. This action is eminently just; but it is difficult to see how it was authorized by any provision of the existing law, and some legal arrangements should be provided for similar cases hereafter arising.

The high rate of the super-tax makes it necessary to change the existing method of taxing stock dividends. This was not of great importance prior to the Act of 1917, but it is now of vital consequence. Whether stock dividends should be treated

¹ The Senate Finance Committee has sought to find a remedy by exempting personal-service corporations from the excess-profits tax and by relieving corporations in general from the six per cent differential income tax provided in the House bill.

as taxable income is a question upon which opinions differ; but in any case the present method of taxing stock dividends is wrong. According to it, the value of each share of stock distributed is taken to be a proportionate part of the distributed surplus, and this results, in practically every case, in valuing a share at par. In some instances this rule greatly overvalues the gain accruing to stockholders from the increase in the number of shares which they hold, and it is desirable that some fairer method of determining the value should be devised and put into practical operation. Furthermore, the present method frequently results in double taxation. A person who buys a share of stock at 160, which figure reflects the enhanced earning power due to the accumulated surplus of the corporation, and then, some years later, receives an additional share of stock having a par value of \$100, will be taxed upon \$100 of income under the present method. Even if we assume that the new share of stock has a market value of \$100, it is clear that such a stockholder has gained only \$40 from the purchase of the original share at 160. Meanwhile the person from whom he purchased the original share has been required (assuming that he bought it at par which represented its value before the accumulation of the corporation's surplus) to return as taxable income the \$60 of profit which he made when he sold his stock. Thus the government has taxed the two persons upon an assumed income of \$160, when at the most there has been an increase of only \$100 in the value of the investment. Until some better remedy is found, provision should be made that the taxable income resulting from a stock dividend should not exceed the difference between the value of the shares held by the stockholder after the declaration of a dividend and the price paid for his original shares of stock. Under such an arrangement, in the case above assumed, the person who purchased a share of stock at 160 and then received an additional share which made his total holdings worth \$200 would be taxed upon an income of \$40; while, of course, the original stockholder, who purchased at par the share which he sold at 160, would be taxed upon \$60 of income.

The income tax of 1913 established an elaborate system of collection at source which, among other things, had the effect of throwing upon obligor corporations the payment of so much of the tax as fell upon interest on bonds issued under agreements by which the obligor covenanted to pay the interest free of any

tax which it might be required to deduct and to withhold at the source. The United States was never a party to any of these contracts and was not bound, morally or otherwise, to favor either of the contracting parties. It should have imposed the income tax upon the bondholder as a personal obligation in such a way as to oblige him, rather than the corporation, to pay it under the terms of the covenants, if that was the best fiscal and social policy; or it should have collected the tax at the source, with the result that, under the covenants, the corporations would have had to bear it, if that was the best policy to pursue. By deciding to collect the tax at the source Congress placed the burden upon the corporations and relieved the bondholders; but it inserted in the law of 1913 a provision which was probably intended to prevent future tax covenants from being made. This provision, however, did not prove effective, and later on it was repealed; so that the issue of so-called tax-exempt bonds has continued. In 1917 Congress abandoned the method of collecting the tax at the source except in the case of incomes of non-resident aliens and interest paid by corporations upon bonds issued with tax covenants. But the Act of 1917 did not require the whole of the normal tax to be withheld and deducted at the source, for it provided that only two per cent of the tax should be withheld and deducted and that the remaining two per cent should be assessed upon bondholders as a personal obligation. The bill now pending in Congress provides in a similar manner that the amount collected at the source shall be only two per cent and that the rest of the normal tax shall be collected from bondholders. If the whole of the normal tax were to be collected at the source, further issues of tax-exempt bonds could not be made, because few corporations, if any, would care to assume such a burden. The adjustment reached in 1917 and retained by the pending bill permits continued issues of such bonds, and raises the important question of the desirability of permitting an income tax to be made the subject of such contracts.

Up to the present time interest upon state and municipal obligations has been exempt from the federal income tax. From every point of view such exemption is highly objectionable. In the first place it provides a perfectly legal method by which taxpayers may avoid the federal income tax. In the second place it makes the rate imposed under the super-tax depend upon the character of a taxpayer's investments, and not upon the total amount of his income, an arrangement which is directly opposed

to the theory of progressive taxation and in practice tends to make progression inequitable in its results. In the third place it puts state and municipal credit upon an essentially artificial basis; and, when the present restriction upon state and municipal issues comes to an end, will place a high premium upon improvident borrowing. A constitutional question is undoubtedly involved; but this should be adjudicated now, and should not be permitted to continue indefinitely as an argument against action which ought to be taken with the least possible delay. The sixteenth amendment to the federal constitution seems to authorize Congress to tax incomes from whatever sources derived, and language used by the court in cases not directly involving this question should not prevent Congress from putting to a test the broad authority conferred upon it by the amendment. Whether a tax should be imposed upon all outstanding issues, or should be confined to future issues of state and municipal obligations, is a question upon which opinions differ; but difficulty at this point can be avoided by confining the tax to future issues. The bill reported by the Ways and Means committee very wisely provided that the income tax should be imposed upon future issues of state and municipal obligations, but this provision unfortunately has been stricken from the pending bill. It is to be hoped that before final action is taken the views of the Ways and Means committee will prevail.

2. The Excess-Profits Tax

As already observed, the excess-profits tax imposed by the Act of 1917 proved a great fiscal success. At a time when revenue was a paramount consideration, this result is greatly to the credit of the tax and, considered in a broad way, is ample justification of its enactment. When this is said, however, praise must end and criticism begin; for it appears certain that the success of the tax was due not so much to the manner in which the law was drawn, as to the skill and good judgment of the Internal Revenue department in administering the act and to the loyalty of the taxpayers in complying as best they could with the crude, obscure and, in many ways, harsh and unequal revenue measure.

The law undertook to levy a tax on profits in excess of a stated deduction, and to levy it at rates varying with the percentage which the taxable income bore to the invested capital. The result in certain important respects was the reverse of what Congress

probably intended. The Secretary of the Treasury has published statistics which show that the tax collected from individual contributors bore no necessary relation to war profits and imposed much heavier rates upon small than upon large concerns,¹ yet both of these results were exactly what might have been expected. The rate of profits varies greatly in different branches of industry and cannot have a direct relation to the extent to which different lines have profited as a result of the war. It should also have been evident to the framers of the Act that very large concerns seldom or never realize such high percentages of profits as successful concerns of a moderate or small size. These facts deserve to be recorded in this report, because they illustrate so strikingly the tendency of laws to operate in a manner more or less different from that which their makers intend.

In view of the results just mentioned the Treasury recommended that an alternative system be introduced by which two taxes should be computed, one upon the present excess-profits principle and the other upon the war-profits principle adopted by Great Britain, which bases the tax upon the excess of the profits realized in the taxable year above the average profits realized during a series of years prior to the war; with a provision that the higher of the two amounts thus determined should be the amount of the tax actually assessed. Such an arrangement would undoubtedly secure greater equality in the taxes levied upon different lines of industry; but whether it would materially affect the status of large and small concerns is not so clear.² It is evident that the proposed arrangement will greatly increase the complexity of the tax and the labor of administering it. That such a provision should be found necessary is striking evidence of the erratic workings of any tax levied upon business profits except by the method of a proportional levy upon the entire amount of such profits. The excess-profits tax of the present year gave erratic results in numerous cases, and a war-profits tax

¹ Statistics representing 7,899 corporations believed to make a representative showing indicate that the ratio of the net income to invested capital, and therefore the rate of tax imposed, was roughly in inverse proportion to the size of the company. Cf. *Hearings before the Committee on Ways and Means of the House of Representatives*, August 14, 1918, p. 2040.

² That this is the view of the framers of the pending bill may, perhaps, be inferred from the fact that the bill, at the time of writing, fixes a maximum limit for the amount of the tax that shall be imposed upon concerns having an invested capital of \$50,000 or less.

upon the British model would have had the same result. The proposed combination of the two methods will not eliminate such results in cases where the application of either method leads to an excessively high tax, but will eliminate them in cases where the use of a single method would result in an unduly low rate of taxation. The net result may be a reduction in the number of erratic cases, but the proposed combination of methods will complicate the law and increase the cost of administration. If Congress continues to tax business profits, it should discard the cumbersome and complicated paraphernalia of the present law and levy a simple tax upon the net income derived from business enterprise.

The most difficult and in many ways the most important provision of the existing excess-profits tax is that which provides for the determination of invested capital. The intention of the Act of 1917 was that invested capital should include all the capital put into a business by the proprietors, including earnings accumulated prior to the taxable year as well as the original investment; on the other hand, appreciation of capital assets was to be excluded. The law also provided that the amount determined should be the average monthly investment. This seems simple, but in practice the determination of an actual monthly average was difficult in many cases and impossible in some instances. Where, however, the value of the various items of invested capital was readily ascertainable, there was probably no difficulty in arriving at a figure roughly approximating the amount continuously employed throughout the year.

In elaborating the definition of invested capital, and still more in administering the law, many difficulties were encountered:

1. In the first place it was necessary for the Act to provide that, in general, capital invested in non-taxable securities should not be considered invested capital, because the income from such securities was not taxed.¹ This provision was reasonable in most cases, but was obviously inapplicable to concerns that made a business of dealing in non-taxable securities such as state and municipal bonds. The injustice of taxing such concerns upon profits derived from the purchase and sale of non-taxables while excluding the securities from the definition of invested capital,

¹ For obvious reasons obligations of the United States were exempted from this rule and were allowed to be included with the invested capital.

led the Treasury department to make a ruling, apparently contrary to the provisions of the law, that, whenever income consists partly of taxable gains or profits arising from trading in non-taxable securities, such securities may be included in the invested capital up to an amount bearing the same ratio to the total investment in non-taxable securities as the amount of the trading profits bears to the total income. It is interesting to note that the report of the Ways and Means committee introducing the pending war-revenue bill declares that the law of 1917 "specifically states" that non-taxable securities shall be excluded from non-taxable income, and that, therefore, difficulty arises in the taxation of "certain investment banking houses whose business is almost entirely confined to tax-exempt securities." The pending bill, therefore, provides that in cases where the income from inadmissible assets consists in part of profit derived from the sale thereof, a corresponding part of the capital invested in such assets shall be included in the invested capital.

2. In the next place it was necessary to determine what should be done with borrowed capital, and the law provided that invested capital should not include "money or other property borrowed". This express provision of the law had also to be disregarded in certain cases. In ascertaining their taxable income corporations were not allowed to deduct interest paid on indebtedness in excess of an amount equal to their paid-up capital stock plus one-half of their interest-bearing indebtedness. This arbitrary limitation created taxable income considerably in excess of the true net income of many corporations; and if such companies had been denied the right to include in their invested capital at least the part of their indebtedness in respect of which they were denied a deduction for interest, many intolerable situations would have arisen. The Treasury cut the knot by ruling that a corporation which, under the income tax, was not allowed to deduct the entire interest paid upon its debts, might include in its invested capital a proportion of its permanent indebtedness corresponding to the proportion of the interest payments which it was not allowed to deduct. This ruling, while perhaps not authorized by the law, provided a remedy for many hardships that would have arisen if the act had been literally enforced. But it also had another result. The reason for determining invested capital was to establish the amount of the deduction of seven, eight or nine per cent, which was allowed under the excess-profits tax. If the arbitrary

limitation upon interest increased a concern's taxable income by the amount of \$50,000, which we may assume to represent the interest paid on one million dollars of permanent indebtedness in excess of the limitation, the permission to include this million dollars in the invested capital entitled the concern to a deduction of from \$70,000 to \$90,000; so that it was better off than if it had been allowed to deduct the whole of the interest paid upon indebtedness. The pending bill removes the arbitrary limitation upon a corporation's interest deduction and will, therefore, obviate the difficulty encountered in this connection under the Act of 1917. It will also have the effect of increasing the taxes paid by a certain number of corporations.¹

3. In the third place difficulty was encountered in cases where corporations had issued stock for the purchase of tangible property. The law provided that in such instances the amount of the investment should be taken to be the cash value of the tangible property at the time of payment, unless such payment was made prior to January 1, 1914, in which case the investment should be taken to be the cash value of the tangible property on that date. It further prescribed that, in no case, should such investment exceed the par value of the shares specifically issued in payment for tangible property. This has produced no little inequality. If a corporation, at some date prior to January 1, 1914, issued stock to the amount of one million dollars for real estate worth at that time not more than half a million, and if such real estate subsequently appreciated so that on January 1, 1914, it was worth one million, the company was entitled to be credited with one million of invested capital. But if another corporation upon the same date prior to January 1, 1914, purchased real estate worth half a million, by issuing half a million of capital stock, it could be credited with only half a million of invested capital even though by January 1, 1914, this real estate had appreciated until it was worth a million. The pending bill removes this inequality, but it does so by striking out the provision that property purchased prior to January 1, 1914, shall be valued

¹ In this connection it should be noted that the form of return prescribed by the Treasury department and a ruling contained in a letter dated May 17, 1918, allowed so-called inadmissible assets to be offset by indebtedness, with the result that the deduction made from admissible assets on account of borrowed capital was reduced by the amount of indebtedness offset against the inadmissible assets. This interpretation doubtless relieved numerous cases of genuine hardship, but it is doubtful whether it was authorized by the law.

as of that date. This means that all tangible property purchased by the issue of stock will be valued as of the date of payment, with the proviso that the value shall not exceed the par value of such issued stock. The result will be that a conservative concern which has issued stock in exchange for property taken over from members of the company at less than the true market value will fail to secure credit for part of the capital actually invested by stockholders.

4. A fourth difficulty arose in connection with the valuation of good will, sometimes a dubious and sometimes a solid and valuable asset. The law provided that good will, trade marks and brands, and franchises and other similar assets should be included as invested capital if they were paid for specifically in cash or by tangible property; but that, if they were purchased by the issue of shares in the capital stock of corporations, or by shares in a partnership, prior to March 3, 1917, they should be valued at not more than the actual cash value at the time of purchase. Further provisos limited the valuation to the par value of the stock issued by a corporation for such a purpose, and imposed the limitation that the valuation should not exceed twenty per cent of the total capital stock of a corporation or the total capital of a partnership. The result was that, in cases where good will and similar assets had been purchased for cash or tangible property, they could be counted as invested capital up to their full value; but that, where identically similar and equally valuable assets had been purchased by the issue of shares of capital stock or by shares in a partnership enterprise, they must come under arbitrary limitations which would frequently result in a valuation much below the actual market value. Finally, in cases where good will and other similar assets had been gradually acquired by the activity and enterprise of a business concern, and had not been purchased, they were not allowed to be counted at all; although other concerns which had acquired similar assets by purchase, perhaps as the result of a reorganization carried through prior to March 3, 1917, could secure a substantial allowance. This has resulted in serious inequalities in certain cases. It has developed that concerns in the same branch of trade have been subjected to discriminating treatment which goes far to destroy the competitive conditions formerly existing. In one case where the competition is intense and the taxes are very heavy we have found that the inequality resulting from such discrimination

made a difference of thirty per cent in the amount of taxes paid. With a light tax the difficulty might not be serious; but with one that may amount to thirty, forty or fifty per cent the discrimination is too grievous to be easily borne.

5. Another cause of inequality was the provision made for patents and copyrights. If purchased for cash these could be treated as invested capital; but if purchased by the issue of capital stock or by shares in a partnership they could not be valued at more than the par value of such stock or the amount of such shares in the partnership. This has meant that patents or copyrights of equal value have counted for much or little in determining a concern's invested capital according to the practice followed in valuing such assets. In cases where valuable patents and copyrights have been turned in by members of a concern for little or no consideration in accordance with a policy of extreme conservatism, the excess-profits tax has penalized conservative methods of business management.¹ The pending bill proposes to limit the valuation of patents to twenty per cent of a concern's capital.

In determining the amount of taxable income certain difficulties were bound to arise under a tax as heavy as the excess-profits tax. The law provided that the income subject to the tax should be determined in the same manner as that subject to the income tax,² except that corporations might deduct income received from dividends upon the stock of other taxable corporations. In the administration of the law the following problems arose:

1. The income tax limited the deduction on account of salaries to the amounts *actually paid* in 1917, a provision which occasioned no difficulty under the income tax but would have resulted in great hardship and inequality under the excess-profits tax in cases where the proprietors of business concerns had never been

¹ One result of the excess-profits tax has been that not a few concerns have "written up" patents and other similar assets which, under conservative methods of accounting, they had previously carried at nominal valuations. This had to be done, of course, under the limitations imposed by the law; but the statistics which we have collected show a substantial increase in the figures at which some companies are now carrying their good will, patents, copyrights, and trade marks or brands.

² It should be noted, however, that since the amount of the excess-profits tax could be deducted in determining the amount of income subject to the income tax, there was a further important difference in the bases of the two taxes.

accustomed to pay themselves stated salaries. In spite of the limitation imposed by the law the Treasury department ruled that such concerns might be allowed to deduct a reasonable amount for salaries even though such salaries had not been actually paid. This ruling prevented an immense amount of hardship from arising under the measure enacted by Congress.

2. Another difficulty arises in the case of business enterprises the profits of which fluctuate greatly from year to year. The law evidently intended that the entire income for 1917 in excess of the deduction should be taxed at the very high rates of the excess-profits tax and without regard to the inevitable fluctuations in lines of business where the profits of good years must in some part offset the losses of bad years. Neither did it provide for the fact that profits realized in 1917 might be the fruit of activities long antedating that year and requiring heavy advances yielding no returns during a series of prior years. For such cases the Treasury Department undertook to provide some remedy under the provisions of section 210 of the Act of 1917. This section apparently related to a very different matter. It provided that in any case where the Secretary of the Treasury might be unable "satisfactorily to determine the invested capital," the amount of the authorized deduction (seven, eight or nine per cent of the invested capital) should be determined with reference to the deduction granted to representative concerns engaged in a similar trade or business. Nothing in this section applied to cases where the invested capital could be satisfactorily determined. In its published regulations¹ the Treasury department, after enumerating various cases to which section 210 was clearly applicable, held that the section might be invoked in cases where "the invested capital is seriously disproportionate to the taxable income"; which cases might arise through "the realization in one year of the earnings of capital unproductively invested through a period of years or of the fruits of activities antedating the taxable year", as well as through inability to allow properly for "amortization, obsolescence, or exceptional depreciation" of war plants. Thus the section was made applicable to cases in which the invested capital could be determined not only with satisfactory, but with deadly accuracy,—a somewhat extraordinary result. From every practical point of view, however, the ruling was extremely fortunate because it enabled the de-

¹ Regulations No. 41, Article 52 (February 4, 1918).

partment to give relief in cases where the power to tax involved not only the "power to destroy" but the actual exercise of that power. It appears that under this interpretation of section 210 the department has reconstructed the capital of no inconsiderable number of concerns with a view to reducing to a reasonable figure the taxable income in excess of the authorized deduction. In fact, the language of the ruling indicates that it was considered proper, under section 210, to make an allowance for irregularity of earnings and for amortization, obsolescence or exceptional depreciation. It may be concluded, therefore, that the income subject to the excess-profit tax has been determined in a number of cases upon a different basis from that followed under the income tax law. Such action was undoubtedly necessary in order to avoid the most extreme hardship; but provision should have been made for it in the law either by re-defining income for the purpose of the excess-profits tax or by conferring upon the Treasury department broad discretionary power in administering the Act. This is a matter which has been already discussed in connection with the federal income tax.

The deduction allowed under the excess-profits tax was to be either seven, eight or nine per cent (according to the average amount of net income during the prewar period), plus a specific deduction of \$3,000 in the case of a corporation or \$6,000 in the case of an individual or partnership.¹ The justification of allowing corporations a smaller specific deduction is not obvious and has never been satisfactorily demonstrated. The rates of from seven to nine per cent² were sufficient to exempt an amount of income representing "a good, moderate, and reasonable profit" in some lines of industry, but they exempted very much less than that in many others. Generally speaking, in staple lines of industry the deduction was frequently equivalent to a normal profit, while in specialties it was very much less. The same thing is true of well-established industries as compared with those still

¹ The further provision was made that, if the taxpayer had no income, or an abnormally low income, during the prewar period, the deduction should be determined with reference to that allowed representative concerns in a similar trade or business.

² In not a few cases the difficulty of determining the rate of profit during the prewar period or that of determining the prewar capital led concerns to claim the minimum deduction of seven per cent purely on account of the difficulty or expense of determining the exact facts.

in the experimental stage, of industries involving a minimum of risk as compared with those which are attended with unusual hazards, and of industries in which profits are relatively stable as compared with those in which earnings fluctuate greatly from year to year. This is the cardinal defect of any tax levied upon the excess-profits principle; and at this point there can be no doubt that the war-profits principle followed by Great Britain gives a much fairer result. The British method, however, has the disadvantage of favoring concerns, or even entire lines of industry, which happened to be especially prosperous during the prewar period, and therefore does not necessarily give a better net result than the method followed by the United States. Whichever method a government may elect to follow will probably produce so many erratic results that the tax administrator will wish that the other had been adopted. A combination of the two methods, such as is now contemplated, may give better net results, but will complicate greatly the administration of the tax.

The rates imposed by the excess-profits tax ranged from twenty per cent of the amount of the net income in excess of the deduction but not exceeding fifteen per cent of the invested capital, up to sixty per cent upon increments of net income in excess of thirty-three per cent of such capital. Thus, ignoring the specific deduction which was negligible in the case of large concerns, a company earning fifteen per cent upon its invested capital and entitled to a deduction of eight per cent, paid a tax amounting to 1.4 per cent of its invested capital, or a trifle less than ten per cent of its net income; while a company earning fifty per cent paid a tax amounting to 18.2 per cent upon its invested capital, or 36.4 per cent of its net income; and a company earning one hundred per cent paid 48.2 per cent on its invested capital and the same percentage of its net income.

In regard to the specific exemption of \$3,000 or \$6,000 the section of the law prescribing the rates of taxation was so obscure that there was much difference of opinion concerning its application. It was clear that "net income in excess of the deduction" was to be the basis for determining the rate; but, if the allowance of seven, eight or nine per cent plus the specific deduction amounted to more than fifteen per cent of the taxpayer's invested capital, the law seemed to provide no way by which a taxpayer could get so much of the deduction as exceeded the figure of fifteen per cent. This was because the law clearly provided that

the whole "amount of the net income in excess of fifteen per centum and not in excess of twenty per centum" should be taxed at the rate of twenty-five per cent; and so on with the increments of income in excess of twenty per cent. The Treasury department, however, came to the relief of the small taxpayer with a ruling, apparently contrary to the provisions of section 201, by which it was held that any amount of the deduction in excess of fifteen per cent of the invested capital could be deducted from increments of net income in excess of fifteen per cent; which would obviously result in taxing such increments at less than their whole amount.

One of the unfortunate results of the Act of 1917 was the enormous disproportion between the tax imposed upon a concern having a nominal capital and that levied upon one having a capital slightly in excess of the amount which the Treasury department might hold to be nominal. The former concern was subject to a flat tax at the comparatively low rate of eight per cent, while the latter, if it was successful, might find itself subject to a tax of forty per cent or upwards because its invested capital was so small relatively to its earnings. Thus a decision by the department that a concern's capital exceeded a nominal amount might have the effect of increasing the tax rate from eight to forty per cent. At the time of writing the pending bill proposes a tax of twenty per cent upon concerns having a nominal capital. This will make the graduation of the tax rates less abrupt in a majority of cases, but will not wholly remove the difficulty.

A matter of no little interest is the definition which the Treasury department gave to the term "nominal capital". Section 209 of the Act of 1917 provided that "a trade or business having no invested capital or not more than a nominal capital" should be taxed at the flat rate of eight per cent upon its net income in excess of \$3,000 or \$6,000, according as it happened to be incorporated or unincorporated.¹ The legislative history of the Act may indicate that its framers, or some of them, intended that this section should apply to lawyers, or other persons rendering personal services, whose capital is not a material factor in producing their income. But this is not the language of the Act which makes the definition turn wholly upon the amount of capital invested in a trade or business. A taxpayer having "no invested capital" might be one who does business wholly with borrowed

¹ Foreign corporations and non-resident aliens were not allowed this deduction.

money, just as clearly as he might be a lawyer or any other person engaged in rendering personal services. Again the words "not more than a nominal capital" turn wholly upon the amount of capital employed and have no reference to its being employed by a law firm, or any other concern rendering personal services, rather than by a concern engaged in commercial operations. Yet the Treasury department, in various rulings, has sought to read into section 209 an interpretation which would make it apply "primarily to occupations, professions, trades and businesses engaged principally in rendering personal services in which the employment of capital is not necessary and the earnings of which are to be ascribed primarily to the activities of the owners"; and has even ruled that "no weight will be given to the fact" that a business "is carried on by means of personal service unless the principal owners are regularly engaged in the active conduct of the trade or business". This ruling was followed by a series of remarkable letters which held, for instance, that, as long as the proprietor of a barber shop or vaudeville theatre renders personal services by wielding a razor or doing a turn upon the stage, he has only a nominal invested capital; and that if he becomes his own cashier or goes to work in the box office, he has more than a nominal capital. Section 303 of the pending bill re-writes this provision in a manner which eliminates the term "nominal capital" and imposes a flat tax of twenty per cent upon net income in excess of the stated deduction, derived from any business "the earnings of which are to be ascribed primarily to the activities of the principal owners" and in which capital (whether invested, borrowed, or rented) "is not directly or indirectly a material income-producing factor". This will eliminate certain commission houses, but, if the word "rented" is retained, may also eliminate law firms and other concerns rendering personal services, which occupy expensive "rented" offices.

A final matter is the great need of further simplification of both the income and the excess-profits tax, particularly the latter. The law relating to both is now in such shape that the ordinary citizen cannot understand it, and upon many of the difficult questions which arise cannot get very good advice from the average lawyer, accountant, or local internal revenue officials. The mere ascertainment of the data on which the computation of the tax depends frequently involves a large expenditure for clerical services, while the fees of accountants and lawyers swell the total cost borne by

the taxpayer to proportions which are often excessive.¹ Expenditures running from five to twenty-five thousand dollars, and representing between one and two per cent of the amount of taxes found to be due, are frequently necessary; and this means that the expense occasioned the taxpayer often equals or exceeds the average expense which the collection of the tax directly occasions to the government. In not a few cases it has cost taxpayers \$700 or \$800 to determine that their tax liability was between \$1,000 and \$2,000, and in some instances it has cost from \$25 to \$500 to determine that taxpayers had no taxable income.

3. The Income and Excess-Profits Taxes in their Relation to our Present Industrial Situation

From the fiscal point of view the federal income and excess-profits taxes have been conspicuously and even brilliantly successful. They have been attended, the latter to a much greater extent than the former, with many inequalities, and have resulted in no little hardship; but such difficulties have been minimized at many points by the rulings of the Treasury department. The result has been arbitrary and discretionary taxation, very objectionable under ordinary conditions but justifiable as a war measure. Upon the whole the balance seems to turn greatly in favor of these extraordinarily heavy war taxes.

The industrial effects of the taxes remain to be considered. Concerning them it is probably too early to reach a final conclusion, and it is obvious that the somewhat abrupt termination of the war may make the results materially different from what they would have been if the war had continued through the year 1919. Fear was expressed that taxation might prove so heavy as to diminish the ability of our essential industries to respond to the great demands made upon them by the war, and some anxiety is now felt concerning the effects of continued heavy taxation upon the ability of business to readjust itself to the conditions following the restoration of peace. Manifestly, the latter question is the one of immediate practical importance.

¹ Of course, expenditures for accountants, lawyers, and additional clerical assistance are deductible business expenses, so that in the case of business concerns a part of the cost borne by the taxpayer in the first instance is thrown back upon the government. This does not mean, however, that the total cost of collecting the tax is any less, and does not affect the conclusion that this cost is frequently excessive.

The reason for existing apprehension is found in the conditions of war-time industry and particularly in the unsubstantial character of no small part of the so-called "war profits". In a period of great expansion, with its inevitable accompaniment of inflated values, almost every concern that increases its gross output or sales can show a large book profit at the end of the year; and it is upon this profit that income and excess-profits taxes are necessarily levied. But experience teaches that book profits realized during a period of great expansion are in many cases partly or largely offset by the losses which must be taken when expansion comes to an end and industry returns to a normal basis. This danger can be minimized only by liquidating liabilities, writing off new plant, and making provision for shrinkage in the value of inventories when prices find their peace level; all of which things are difficult or impossible if taxation absorbs too large a proportion of the profits. What is going to follow the termination of this war no one can predict with certainty, but men who are guided by experience rather than speculation naturally and very reasonably expect that contraction and deflation will sooner or later follow expansion and inflation.

In order to determine whether there is danger that Congress, in its praiseworthy desire to make the finances of the nation strong, has been and still is overdoing the taxation of profits, a careful examination has been made of the condition of several hundred business concerns during the period from 1914 to 1918. The data here presented relate to 402 concerns having in 1918 an aggregate capitalization of \$6,114,000,000. Most of them are engaged in manufacturing, but a few carry on mercantile and miscellaneous kinds of business. Public-service corporations and banks or other financial institutions have not been included because the conditions under which they operate differ in so many important respects from those affecting manufacturing and mercantile concerns. Certain large holding companies, like the United States Steel Corporation, have also been excluded because it was impossible to secure data in a form admitting of such analysis as it was necessary to make. With these exclusions, it will be seen that the concerns studied provide a fair, and probably a sufficient, sample of the manufacturing industries of the United States. One point at which the data are unsatisfactory is that they do not include any considerable number of mercantile concerns. Further investigation may show that

the conclusions reached need to be qualified before they are applied to mercantile business, but this seems improbable. Another qualification is that the concerns studied are of fairly large size, their average capitalization being something over \$15,000,000; and it is obviously possible that an investigation of a large number of smaller concerns would reveal conditions that are either more or less favorable than those shown by larger enterprises.¹ In about half of the cases data have been obtained from either Poor's or Moody's manuals. In the rest they have been secured by means of a questionnaire.

Since the most fundamental and interesting problem involved in the investigation is the nature of the profits realized by concerns which have expanded during a period of marked inflation, the enterprises have been divided into two groups hereafter called "expanded" and "not-expanded". These terms obviously need exact definition before they can be used for statistical purposes, and it has seemed best to define an expanded concern as one whose total assets and total liabilities have increased by more than twenty per cent during the period from 1914 to 1918. This is upon the assumption that in times like the present no concern can keep its product or its volume of sales up to the pre-war level without expanding to a certain extent, and that concerns whose total assets and total liabilities have not increased by at least twenty per cent have done no more than hold their own. It also assumes that companies which have increased materially their product or their volume of sales must have increased their total assets and total liabilities by more than twenty per cent. In the actual examination and classification of the data it appeared that, if these assumptions erred at all, they did so by understating the amount by which assets and liabilities have had to increase in order to maintain business on a pre-war level. It follows, therefore, that some of the concerns here classified as expanded may not have increased materially their physical output or their volume of sales. But it seemed best to adhere to the figure of twenty per cent in order to make sure that the statistics would not exaggerate the conditions found to exist in expanded industries.

¹ In this connection it may be stated that none of the concerns here studied made fabulous percentages of profit or suffered extreme hardship under the operation of the excess profits tax. It proved impossible to secure data concerning extreme cases, and the statistics, therefore, probably represent average rather than extreme conditions.

Turning to the companies which have not expanded, it appears somewhat surprising that so many (148 out of 402) fall in this class. When one considers what an enormous increase of industrial activity has occurred since 1914, it is not a little strange that approximately thirty-seven per cent of the companies have not increased their total assets and total liabilities by as much as twenty per cent. Of these not-expanded concerns a considerable number are smaller companies; 34 of them having an average capitalization of less than \$3,000,000 in 1918, and 74 others having an average capitalization of about \$13,000,000, which figures are to be compared with an average capitalization of over \$15,000,000 for the entire number of 402 companies.

For the purpose of further analysis the not-expanded concerns have been divided into three classes which will hereafter be called Class A, Class B, and Class C. The first of these includes all the companies which were in a strong financial condition in 1918; the third includes all those whose financial condition in 1918 was just the opposite of that in which the concerns in Class A found themselves; while Class B includes all the remaining companies.

The statistics for the forty companies in Class A of the not-expanded concerns are as follows:

ASSETS (000 omitted)		
	1914	1918
Plant account, etc.	\$413,949	\$400,196
Other tangible property	168,424	168,257
Receivables.....	130,402	119,787
Investments.....	78,521	117,802
Cash.....	35,220	95,986
Good will	18,464	17,984
Patents, etc.....	29,715	30,449
All other assets.....	4,142	6,333
Total	\$878,837	\$956,794
LIABILITIES (000 omitted)		
	1914	1918
Capital stock.....	\$611,158	\$608,884
Funded debts	59,922	44,402
Payables	69,085	39,492
Other obligations.....	13,078	21,674
Reserves for taxes.....	662	18,312
Profit and loss.....	124,932	224,030
Total	\$878,837	\$956,794

It will be observed that these concerns have increased their assets by less than ten per cent during the four years covered by our figures, but that they have reduced very greatly their indebtedness. Funded debt has been diminished by over 15 millions, payables have diminished by nearly 30 millions, while other obligations have increased by something over 8 millions. The items included under other obligations were not always easy to classify, and it is possible that in some instances certain things have been included which were not obligations in the ordinary sense of the word. But any errors that may have crept in at this point do not in all probability materially affect the aggregate figures for the forty companies.

Comparing the indebtedness with the quick assets, we find that in 1914 these concerns had 412 millions of "quick" (this is the total of the second, third, fourth, and fifth items in the table of assets), while they owed 142 millions (this is the total of the second, third and fourth items in the table of liabilities). By 1918, however, they had increased their quick assets to 502 millions while they had reduced their indebtedness to 105 millions.

Significant also is the change which had occurred in the composition of the assets. While the total had increased 78 millions, the plant account had been diminished by nearly 14 millions, the other tangible property (merchandise account) had slightly decreased, and the receivables had declined nearly 11 millions. Good will and patents had not changed materially, "other assets" had increased by slightly over 2 millions, and the only items which had increased materially were the investments and the cash. It will be noticed that investments exceeded by 12 millions the total of funded debt, payables, and other obligations; while the cash exceeded by 37 millions the total of the payables and the accrued taxes for which reserves had been set up. Meanwhile the capital stock had very slightly diminished, and the profit and loss account showed an increase of nearly 100 millions. Obviously these companies are prepared for any conditions that may arise; but, since they have not been expanding their business and have been converting their assets into liquid form, they have not helped as much as they might have done to provide the supplies and materials needed for the prosecution of the war. They obviously have not been injured by the federal income and excess-profits taxes, and they appear to have set their houses in order against any contingency that may arise when the war comes to an end.

With the 40 concerns in Class A it is interesting to compare the 34 concerns that fall in Class C. For these the statistics are as follows:

ASSETS (000 omitted)		
	1914	1918
Plant account, etc.....	\$48,405	\$41,834
Other tangible property.....	14,452	16,504
Receivables.....	18,761	13,767
Investments.....	4,874	4,618
Cash.....	2,280	1,682
Good will.....	10,195	10,266
Patents, etc.....	200	140
All other assets.....	941	4,348
Total.....	\$100,108	\$93,159
LIABILITIES (000 omitted)		
	1914	1918
Capital stock.....	\$58,412	\$56,308
Funded debt.....	10,870	12,221
Payables.....	12,289	12,100
Other obligations.....	818	3,646
Reserves for taxes.....	28	277
Profit and loss.....	17,691	8,607
Total.....	\$100,108	\$93,159

It is obvious that we are here dealing with a group of rather small concerns which are in lines of business injuriously affected by the war. In size they average less than \$3,000,000, while the group of concerns in Class A averaged in 1918 nearly \$24,000,000. Their total assets have decreased by 7 millions and their profit-and-loss accounts have shrunk by 9 millions. Evidently the European war has not brought wealth to everybody. The changes in the composition of the assets have not been favorable. Other tangible property (merchandise) has increased by two millions, while investments and cash, particularly the latter, have decreased. In addition to this, the funded debt, payables, and other obligations have increased by four millions. In 1914 the quick assets amounted to 40 millions and the total indebtedness to 24 millions; while by 1918 the "quick" had fallen to 36 millions, and the indebtedness had risen to 28 millions. As a class, these companies have not been burdened by income and excess-profits taxes because their incomes have shrunk and they do not seem to have had excess profits or, indeed, any other kind.

Less interest attaches to Class B of the not-expanded concerns.

Class A included only companies which met certain definite requirements and the same is true of Class C; while Class B includes a greater variety of companies, some of which had been prospering but were not able to qualify for admission to Class A, while others had not prospered but were not so badly off as to fall into Class C. The 74 concerns in Class B, therefore, exhibit much diversity of condition and the total figures are not especially significant. The totals are:

ASSETS (000 omitted)		
	1914	1918
Plant account, etc.....	\$385,329	\$391,419
Other tangible property.....	157,376	224,079
Receivables.....	101,712	114,552
Investments.....	62,847	63,331
Cash.....	23,018	33,570
Good will.....	118,335	120,305
Patents, etc.....	21,923	16,384
All other assets.....	11,894	7,446
Total.....	\$882,434	\$971,086

LIABILITIES (000 omitted)		
	1914	1918
Capital stock	\$591,596	\$571,431
Funded debt	77,215	80,271
Payables	60,646	99,174
Other obligations.....	6,162	14,609
Reserves for taxes.....	28	3,570
Profit and loss	146,787	202,031
Total	\$882,434	\$971,086

It will be seen that these concerns have increased their total assets by nearly 89 millions, but that nearly 73 millions of this amount have gone into plant and other tangible property. Receivables have increased nearly 13 millions, investments by less than half a million, and cash by 10 millions. Meanwhile the funded debt, payables and other obligations have risen from 144 millions to 194 millions. The quick assets of these concerns totaled 345 millions in 1914, while the debts and other obligations amounted to 144 millions, a comparatively favorable showing. In 1918, however, the quick assets amounted to 435 millions and the indebtedness to 194 millions, a condition more nearly approaching the limit of indebtedness which bankers fix for ordinary commercial loans. A further significant fact is that

for the 50 millions of increased obligations the concerns show chiefly an increase in "other tangible property", that is, their merchandise account, which is precisely the kind of asset most likely to shrink when industry readjusts itself to a peace basis. While these concerns can show an increase of more than 55 millions in their profit-and-loss accounts, this increase must be regarded as nothing more than a paper, or book, profit, which will not be actually realized until the debts incurred since 1914 have been paid and inventories have been readjusted so far as necessary upon a basis of peace values. With a group representing such diversity of conditions as prevails in Class B further generalization is difficult.

So much for the 148 concerns which fall in the not-expanded group. Forty of them have prospered and can make the very satisfactory showing revealed by Class A, but they have not been expanding their operations in order to aid in the prosecution of the war. Thirty-four of them, on the other hand, have fallen upon evil days and make the very unsatisfactory showing exhibited by Class C. They have not been injured by war taxation because they have had little or nothing to tax. The remaining 74 concerns, exactly one-half of the total, are in the somewhat unsatisfactory position exhibited by Class B. They have increased their loans in order to finance the purchase of materials and supplies at inflated prices, and unless they improve their condition before a period of readjustment comes they will have some difficult problems to solve. On the face of the returns to-day, however, their indebtedness is still less than half their quick assets, so that we cannot consign them to the limbo of Class C. If times were normal, we could say that the growth of their profit-and-loss account indicates that they have been making money; but times are not normal, and the ultimate result cannot be foretold.

We now turn to the expanded concerns which are the most significant ones for the student of war taxation. They may be classified, like the not-expanded concerns, according to their financial condition in 1918. For Class A, which includes 62 companies, the statistics are as follows:

ASSETS (000 omitted)		
	1914	1918
Plant account, etc.....	\$466,890	\$528,928
Other tangible property.....	133,649	208,481
Receivables.....	72,995	139,682
Investments.....	33,374	75,945
Cash.....	28,358	54,098
Good will.....	6,515	9,703
Patents, etc.....	3,846	3,412
All other assets.....	5,130	18,917
Total.....	\$750,757	\$1,039,166

LIABILITIES (000 omitted)		
	1914	1918
Capital stock.....	\$407,906	\$454,082
Funded debt.....	125,896	94,830
Payables.....	43,977	41,361
Other obligations.....	15,608	30,367
Reserves for taxes.....	110	34,087
Profit and loss.....	157,260	384,439
Total.....	\$750,757	\$1,039,166

These concerns have increased their assets by over 288 millions, or approximately 38 per cent. At the same time they have decreased their funded debt, payables, and other obligations from 185 millions to 166 millions. Their expansion has been financed chiefly out of accumulated profits, and their profit-and-loss account has increased by 227 millions in four years. The outstanding capital stock has increased by somewhat more than 46 millions, partly by stock dividends representing a distribution of profits that would otherwise have increased further the profit and loss account of 1918. Looking at these concerns from the banker's point of view, we find that in 1914 their quick assets amounted to 269 millions, and their funded debt, payables and other obligations to 185 millions; the quick liabilities exceeding the proportion which would be considered satisfactory as a basis for an ordinary bank loan. In 1918, however, the quick assets amounted to 478 millions and the indebtedness to 166 millions, a proportion which establishes a very favorable basis for credit.

Of especial significance is the constitution of the assets. Plant account has increased by 62 millions, but in a relatively small proportion. Other tangible property has increased by 75 millions, or by 58 per cent, but this is not a very large increase for such times as we have been going through. Receivables have

nearly doubled, and in 1918 amounted to over eighty per cent of all the indebtedness. The largest proportionate increase is found in the investments which are 42 millions larger than in 1918, while the cash has risen from 28 to 54 millions. The investments and cash in 1918 totaled 130 millions, and equaled almost eighty per cent of the total indebtedness. There is, indeed, an accrued liability for taxes amounting to 34 millions; but if these were paid, the concerns would still have 96 millions of cash and investments, which would greatly exceed their entire unfunded debt; while their accounts, investments and cash remaining after the payment of taxes exceed by nearly fifty per cent their total indebtedness.

Obviously the concerns in Class A have husbanded their profits against any contingency that may arise after the war. Inventories may shrink in value, some of their receivables may have to be written off, while their indebtedness will have to be met in any event; but these companies have reduced their indebtedness in a period of inflation, have accumulated liquid assets against time of need, and seem able to weather any storms that may be encountered in the immediate or distant future. Conservative management doubtless accounts for this in part; to some extent it appears due to the fact that the excess-profits tax, working in its own erratic way, bore lightly upon certain classes of concerns. But it appears due chiefly to two very significant facts: first, the fact that these concerns expanded to a comparatively moderate extent; and second, the fact that they could expand without increasing very heavily their investments in bricks, mortar, and merchandise. While their total assets have increased over 288 millions, their plant account and other tangible property show an aggregate increase of only 137 millions. Their new plants and increased inventories have been financed out of accumulated earnings which have been sufficient not only to provide for such financing but also to reduce debts and enable the companies to accumulate a large amount of liquid assets. This conclusion will be strikingly reinforced by studies of the expanded concerns included in classes B and C.

The condition of the 124 concerns in Class B is shown by the following figures:

ASSETS (000 omitted)		
	1914	1918
Plant account, etc.....	\$534,058	\$701,448
Other tangible property	246,540	525,840
Receivables.....	169,088	322,157
Investments.....	55,127	76,958
Cash.....	47,707	72,880
Good will	118,202	127,848
Patents, etc.....	17,037	17,293
All other assets	9,607	14,300
Total	\$1,197,366	\$1,858,724
LIABILITIES (000 omitted)		
	1914	1918
Capital stock.....	\$747,978	\$856,102
Funded debt.....	121,849	118,994
Payables	124,357	302,762
Other obligations	7,635	23,307
Reserves for taxes.....	293	39,307
Profit and loss	195,254	518,252
Total	\$1,197,366	\$1,858,724

It will be seen that these companies have increased their assets by more than 661 millions, or approximately 55 per cent. But, unlike the concerns in Class A, they have increased their payables by 178 millions and their other obligations by nearly 16 millions, a total of 194 millions, which is offset to an inappreciable extent by a decrease of less than three millions in their funded debt. Their total indebtedness has increased from 253 millions to 445 millions, or by approximately 192 millions. Yet these concerns have made a great deal of money as is shown by the increase of their profit-and-loss accounts from 195 millions to 518 millions, or by the tidy sum of 323 millions. The profits of the four years are further reflected in the increase of the capital stock from 747 millions to 856 millions, which has been accomplished to a considerable extent by stock dividends representing accumulated profits. The increase of the capital stock and of the profit-and-loss accounts aggregates 431 millions, and yet these concerns have increased their indebtedness by 192 millions. Looking at these companies from the banker's point of view, we find that in 1914 their quick assets amounted to 518 millions and that their total indebtedness was 253 millions, their debts amounting to slightly less than one-half of their "quick". In 1918 their quick assets stood at 998 millions and their total indebtedness at 445 millions, a proportion somewhat more favorable than

that obtaining in 1914. But it is to be noted that they had accrued liabilities for taxes for which they had set up 39 millions of reserves, and that their cash should be reduced by this amount; so that their quick assets should really be placed at 959 millions. This allowance, however, still leaves these companies with a slightly smaller proportion of indebtedness than they showed in 1914. But the improvement was apparent rather than real. The quick assets of 1914 were based upon inventories taken at normal prices, while those for 1918 reflect inventory values that are more or less inflated. The most significant figure in this connection is the increase of 279 millions in the item of other tangible property. The condition of these concerns may be summarized as follows: they have made very large book profits since 1914, profits far larger on paper than those made by the concerns in Class A; but they have been obliged to increase their unfunded indebtedness by 194 millions, and they are carrying larger plants and swollen inventories at values considerably higher than may be warranted after the war. With good luck they may be able to reduce their debts to a normal basis, write off a considerable part of their war plants, and "clean up" their present inventories without excessive loss; but until and unless these things are done, they will not have "realized" their war profits.

We now pass to the 68 companies in Class C, the condition of which is shown by the following figures:

ASSETS (000 omitted)		
	1914	1918
Plant account, etc.....	\$397,176	\$474,511
Other tangible property.....	130,093	395,801
Receivables	101,069	175,869
Investments	20,395	42,922
Cash.....	27,525	55,264
Good will	25,680	29,284
Patents, etc.	4,255	3,806
All other assets.....	9,391	17,477
Total	\$715,584	\$1,194,934
LIABILITIES (000 omitted)		
	1914	1918
Capital stock.....	\$473,170	\$570,265
Funded debt.....	49,745	115,502
Payables	82,107	275,708
Other obligations.....	4,382	11,352
Reserves for taxes.....	263	11,296
Profit and loss	105,917	210,811
Total	\$715,584	\$1,194,934

It will be seen that between 1914 and 1918 these concerns increased their assets by 479 millions, or 67 per cent. But in order to do this they increased their funded debt by 66 millions, their payables by 193 millions, and their other obligations by 7 millions; their total indebtedness increasing by 266 millions, or over 190 per cent. Yet they have made substantial profits, since their profit-and-loss account has risen from 105 millions to 210 millions, or by a hundred per cent. They have also increased their capital stock by 97 millions, in some part through stock dividends representing accumulated profits. Their book profits are much smaller than those of concerns in Class B, and somewhat less than those of concerns in Class A; but their profit-and-loss account has doubled in four years in spite of the diminution caused by stock dividends, so that it is evident that they have made profits which would be considered large in ordinary times. In spite of this fact, however, from the banker's point of view their condition in 1918 was very unfavorable. In 1914 these concerns had quick assets of 279 millions and their total indebtedness was 136 millions, or a trifle less than one-half of their "quick". In 1918, however, their quick assets amounted to 670 millions while their total indebtedness stood at 402 millions, which was 60 per cent of their "quick". If allowance is made for accrued taxes, for which reserves of 11 millions have been set up, the showing would be still more unfavorable. Another bad feature is that, whereas in 1914 nearly forty per cent of the indebtedness was funded, in 1918 the proportion of funded debt had fallen to twenty-nine per cent. It is evident that these companies have expanded in a manner that has compelled them to extend their credit to an undesirable degree, and that they will be very fortunate indeed if they succeed in liquidating their debts, writing down their war plants, and realizing upon their inflated inventories, without experiencing serious embarrassment.

It will be recalled that we found that the highly prosperous concerns in Class A had expanded to a comparatively moderate extent and had not been obliged to increase very heavily their plant and inventory accounts; and we attributed to these facts the highly satisfactory condition revealed by the balance sheets of 1918. This conclusion is strongly reinforced by comparing Class A with Classes B and C.

In the first place the statistics show that Class A increased its assets and liabilities by 38 per cent; while Class B shows an in-

crease of 55 per cent and Class C of 67 per cent. Manifestly there seems to be a very close relation between the extent to which a concern has expanded and the strength of its financial position in 1918, and it is obvious that such strength is, roughly, in inverse proportion to the extent of the expansion.

Turning next to the plant and inventory accounts we find that the plant accounts of Class A increased thirteen per cent; while those of Class B increased thirty-one per cent, and those of Class C increased twenty per cent. At this point the results of the comparison are not uniform, since Class C makes a better showing than Class B; but it is evident that Classes B and C have increased their plant accounts decidedly more than Class A, and it will presently appear that the advantage which Class C has over Class B is more than offset by the change that has occurred in the respective inventory accounts. Examination of these accounts shows that Class A has increased its other tangible property by 58 per cent, that Class B has increased it by 112 per cent, and that Class C has increased it by 204 per cent. Here the approximately inverse relation between the increase of a class of tangible assets and the financial strength of an expanded company in 1918 most clearly asserts itself; and, since with all classes of companies the increase of the other tangible property has been so much greater than the increase of the plant account, we may regard this as the most vital point of the comparison. Rising prices have compelled all expanded concerns to carry greatly increased inventories, and there is a clear and striking relation between the increase of this class of assets and the financial condition in which companies find themselves in 1918.

Accounts receivable, provided that they are reasonably good, are obviously a better asset than new plants acquired at war prices or merchandise carried at inflated valuations. No definite information justifies the assumption that, if the return of peace forces readjustments in industry, the receivables of any one of the three classes of expanded companies will show a greater shrinkage than those of any of the others. On *a priori* grounds we might conjecture that the more conservative concerns, which have expanded least, will have to write off a smaller proportion of their receivables than those companies which have expanded more rapidly; but so much of the business has been on government account that it would be dangerous to indulge in conjecture, and it is better to assume that the receivables of all classes of concerns stand on

approximately the same footing. The statistics show that the receivables of companies in Class A have increased nearly 92 per cent, that the receivables of companies in Class B have increased 90 per cent, and that the receivables of companies in Class C have increased about 74 per cent. The difference is not so marked as in the case of plant and inventory accounts; but, such as it is, it tells in favor of Class A.

The item of investments next invites attention. To the extent that investments consist of Liberty bonds or other disposable securities they obviously contribute very greatly to financial stability. Class A has increased its investments by 42 millions, or 130 per cent; Class B shows an increase of nearly 22 millions, or approximately 40 per cent; while Class C shows an increase of 22 millions, or 110 per cent; Class A obviously making the best showing, but Class C appearing to have an advantage over Class B. This advantage is probably apparent and not real. The item of investments does not consist wholly of Liberty bonds or other disposable securities, but includes, in many cases, stocks and notes or other obligations of subsidiary companies. Exact data are impossible to secure; but it has been determined that companies in Class B and Class C are carrying as investments large amounts of stocks or obligations of subsidiaries, and that the investments of Class A consist very largely of disposable securities. That this conclusion, based upon the study of such details of the investment accounts as are available, is fully warranted can be shown by an examination of the current indebtedness of the various classes of companies. Class C, between 1914 and 1918, increased its payables from 82 to 275 millions, and it is not conceivable that companies compelled to increase their current obligations to such an extent were able to increase their holdings of Liberty bonds and other disposable securities by 22 millions, or 110 per cent. Some of these companies have, indeed, subscribed to Liberty bonds, but have subsequently been obliged to dispose of them. As for ordinary investment securities, it is certain that they have not been buying them at a time when they have been drawing upon their credit to the extent indicated by their funded debt and payables. We may fairly conclude, therefore, that Class A is the only one of the three classes that has been in a position to acquire any large amount of disposable securities, and that the increased investment accounts of Classes B and C represent chiefly investments which are tied up in the business of sub-

sidiary companies. The upshot of the matter is that we have definite knowledge that the 75 millions of investments belonging to companies in Class A consist largely of disposable securities and may be regarded as anchors thrown out to the windward; whereas we have evidence that the investments of companies in Classes B and C represent additional sails spread in order to carry the growing requirements of subsidiaries. The investigation leaves no doubt that at this point Class A had, in 1918, a marked advantage over Classes B and C.

In the item of cash it appears that Class A shows an increase of 92 per cent, Class B of 54 per cent, and Class C of 100 per cent. Here, as in the investment account, Class A has an advantage over Class B, but Class C appears to make a better showing than either of the others. When allowance is made for accrued taxes, it is found that, if we assume that the reserves set up by the three classes of companies are neither materially larger nor smaller than the amounts actually needed for the purpose, Class A is left with 20 millions of cash, which is 8 millions less than it had in 1914; Class B is left with 33 millions, which is 14 millions less than it had in 1914; and Class C is left with 44 millions, which is 17 millions more than it had in 1914. This result appears surprising, but it ceases to be so when it is considered that companies in Class A carry among their investments large amounts of the certificates of indebtedness issued by the Federal Government in anticipation of the proceeds of Liberty loans. Classes B and C doubtless hold some of these certificates, but it is certain that they cannot have invested heavily in such things at a time when they have been increasing their current obligations to the extent shown by the table of liabilities. The difference between four per cent and seven per cent or upward would of itself be enough to prevent this. The chief reason, however, why Class C shows so large an increase in the item of cash is that business has grown so greatly that a larger amount of ready money is absolutely necessary. The concerns in Class A have increased their inventory accounts by only 58 per cent, but have increased their cash by 92 per cent. Upon the other hand, concerns in Class C have increased their inventory accounts by 204 per cent and have increased their cash by 100 per cent, so that they probably have less ready money in proportion to the requirements of the business to-day than they had in 1914.

The items of good will, patents, and other assets are not large

enough to effect our problem materially, but it may be noted that all classes of companies have increased slightly the item of good will, probably for the purpose of obtaining such allowance as could be secured in connection with the excess-profits tax. The valuation placed upon patents is not large enough to be material. The increase of other assets is much greater in Class A than in either of the others.

The most important comparison of all is that of the quick assets of the expanded companies with their total indebtedness, and here the changes that have taken place since 1914 are most significant. In that year Class A had debts amounting to 185 millions and quick assets of 269 millions; the proportion of the debts to the "quick" being nearly seventy per cent, which materially exceeded the proportion usually accepted by bankers in connection with ordinary commercial loans. In the same year Class B showed an indebtedness of 253 millions and quick assets of 518 millions, the proportion being a trifle less than one-half. Class C, in the same year, had an indebtedness of 136 millions and quick assets of 279 millions, which also was a trifle less than the proportion of one-half. Evidently, before the recent period of expansion, the concerns in Class A were, from the banker's point of view, in a materially less favorable position than the companies belonging to Classes B and C.

The 1918 figures show a striking change. Class A shows a total indebtedness of 166 millions, with quick assets of 478 millions, the debts being a trifle more than one-third of the "quick". Class B, on the other hand, had in 1918 an indebtedness of 445 millions, with 998 millions of quick assets, the proportion being somewhat lower than it was in 1914, but not very much below the limit fixed by banker's requirements. Finally Class C, which in 1914 made a better showing than Class A, carried in 1918 an indebtedness of 402 millions with quick assets of 670 millions; the debts amounting to sixty per cent of the "quick". Obviously, the way of the expanded concern is not easy even in time of war profits. A further important fact is that nearly sixty per cent of the debt of concerns in Class A is funded, while the concerns in Classes B and C have funded less than thirty per cent of their indebtedness.

In the foregoing discussion no account has been taken of the policies pursued by the different classes of companies in respect to disbursements for dividends or for moneys withdrawn from

the business of unincorporated concerns. On this point data are available for nearly two-thirds of the companies in Class A, over half of those in Class B, and more than one-third of those in Class C. It appears that, between 1914 and 1918, forty concerns in Class A earned \$374,725,000, and paid out to stockholders or other proprietors, exclusive of salaries, \$182,090,000, or something less than 49 per cent. Sixty-four concerns in Class B earned \$443,642,000 during the same period and disbursed \$222,527,000, or a fraction over fifty per cent. Finally, twenty-four concerns in Class C earned \$182,629,000 during the period in question and disbursed \$88,304,000, or a fraction more than 48 per cent. So far as this incomplete evidence goes, therefore, it appears that there has not been enough difference between the policies pursued by the three classes of concerns to effect materially the situation existing in 1916. Class B has indeed disbursed a slightly larger percentage of its earnings than Class A; but Class C has disbursed a slightly smaller percentage than either of the others. For a slightly larger number of companies data have been obtained concerning the dividend rates maintained from 1914 to 1918. Of forty-two concerns belonging to Class A, 50 per cent increased dividends, 35 per cent maintained the same rates, and 15 per cent reduced dividends. Of eighty-two concerns in Class B, 42 per cent increased dividends, 42 per cent maintained the same rates, and 16 per cent reduced dividends. Of thirty-three concerns in Class C, 24 per cent increased dividends, 36 per cent maintained the same rates, and 39 per cent reduced dividends. These data make it seem probable that companies in Class C have pursued a somewhat more conservative policy than either of the other two classes, so that the condition in which they find themselves in 1918 cannot be attributed to an unduly liberal policy with respect to the distribution of profits.

For a certain number of concerns in each of the three classes it has been possible to obtain data concerning the average rates of dividends from 1914 to 1918. These are shown in the following table:

	1914	1915	1916	1917	1918
29 companies in Class A.	6%	5%	6.6%	11%	13%
61 companies in Class B.	7.5%	6.8%	6.4%	7%	7.5%
25 companies in Class C.	6.1%	5.5%	4%	4.3%	5.5%

These figures confirm the conclusion reached above, that the class of companies which expanded most made the smallest disbursements between 1914 and 1918. In this table the average rates of dividends paid by companies in Class A in 1917 and 1918 have been materially raised by very large disbursements made by two concerns. If these two concerns were excluded, the average dividend rate for 1917 would be 8.3 per cent and that for 1918 would be 10.3 per cent. It will be seen that the available evidence tends to show that the positions in which the three classes of companies find themselves in 1918 are not due to policies pursued with respect to dividends¹ or other disbursements.

It should be observed in this connection, however, that the four hundred and two concerns included in the investigation are mostly companies of fairly large size, none of which have counted their profits by the hundred per cent, as some smaller concerns have been able to do. A striking fact developed by the excess-profits tax is that the smaller concerns have made the largest rates of profit, while few large companies have shown fabulous percentages of earnings. It is partly in view of this fact that the bill now pending in Congress proposes to fix a maximum limit to the tax that shall be imposed upon small concerns. If data had been obtainable concerning the most prosperous classes of smaller concerns, it might have been found that conditions differ materially from those obtaining among the larger companies. Successful small concerns enjoy not only larger profits but also less publicity.

Analysis of the data gathered concerning the four hundred and two concerns which have been investigated seems to point to the following conclusions:

1. Class A of the concerns which have not expanded is in a much better position than any other class of companies in 1918. The indebtedness of these concerns is hardly more than one-fifth of their quick assets. Their plant accounts are less than they were in 1914, and their merchandise accounts are no greater. They have reduced their receivables, probably by closer collections, and they have enormously increased their investments and their cash. They hold cash sufficient to pay all the taxes for which they have set up reserves, liquidate their current accounts,

¹ All the statistics given above relate to cash dividends, stock dividends being excluded.

extinguish all other obligations except their funded debt, which is very small, and still leave them nearly seventeen millions of money on hand which would be practically half as much as they carried in 1914. But these concerns have not done as much as the expanded companies to help us win the war.

2. Class B of the not-expanded concerns seems to have prospered moderately; but its war profits have not yet been converted into cash, and will not be until its debts have been reduced and its inventories readjusted as far as may be necessary when peace returns.

3. Class C of the not-expanded concerns presents no problem for the student of war taxation because it has not been making enough money to be affected materially by either the income or the excess-profits tax. This is sufficiently indicated by the insignificant reserves for taxes set up in 1918.

4. Of the 254 concerns which have expanded, less than a quarter (62) made a showing in 1918 which entitled them to be placed in Class A; the other three-quarters have made large book profits, but they have at the same time drawn heavily upon their credit and they are still a considerable distance—some of them, indeed, are very far—from dry land.

5. The 62 expanded concerns in Class A are there chiefly because they expanded much less than the other companies, and because they managed to expand without increasing very greatly their investment in plants or merchandise, which may be subject to considerable shrinkage after the war. For these reasons they have been able to reduce their indebtedness and to decrease very greatly the proportion it bears to their quick assets. This is the more noteworthy because in 1914 the ratio of their indebtedness to their "quick" was far higher than that which obtained in the concerns belong to Classes B and C. Testing the credit of the three classes of companies by the standard which a banker would use, we find that the war has completely reversed the conditions of expanded concerns. Class A which was last is now first, and Class C which was in the first rank is now last.

6. Class B of the expanded concerns appears to have made far larger profits than any other class of companies, expanded or not expanded. These profits, however, for the most part still remain in the business which has not only devoured them but has also consumed vast sums of borrowed money. The accumulated profits and borrowed money have been invested chiefly in plants

and inventories which may shrink very largely after the war. With good luck, these companies may be able to reduce their debts and take up a considerable shrinkage in their tangible assets; but only a continuation of large earnings will enable them to do this; while, if these earnings continue to be absorbed very largely by war taxes, it is evident that the concerns will require a long time to reach dry land. Their book profits have been large, but they have not been realized, and a large part of them may never be.

7. The concerns in Class C, precisely because they have expanded most and have accumulated the largest proportion of tangible assets which may be subject to shrinkage after the war, are in a highly unsatisfactory condition in 1918. They appear to have made profits which would be considered large in ordinary times, but they have made smaller profits than concerns in Classes A and B; and for that reason, also, they find themselves in an unsatisfactory position to-day. Several years of large earnings undiminished materially by federal taxation are the only thing that will enable these companies to reach shore. And yet in 1914 they could make a distinctly better showing to a banker than the companies in Class A, since their indebtedness at that time amounted to a much smaller percentage of their quick assets. One of these concerns not long ago published its earnings for the last fiscal year which is later than that to which the statistics relate. It shows a net income several times as large as in the years before the war; but, after allowing for prospective taxes and the ordinary dividends, the company will have a balance of earnings equal to only ten per cent of its indebtedness. Comment is unnecessary.

8. In conclusion it is to be observed that book profits, in times of expansion and inflation, are not the same as realized profits. A concern which expands its operations materially may expect to find that a large part of its war profits will be needed to finance its expanded business; while, if it expands beyond a certain moderate extent, it may also expect to be obliged to borrow very large sums of money. If its earnings are large and are not absorbed by excessive taxes, it may reasonably expect to repay its loans, provide for a possible shrinkage of its tangible assets, and ultimately realize its war profits. But expansion has its hazards, and these seem to be in direct proportion to its extent. War taxation, in particular, is a most serious hazard, the import-

ance of which may be more fully realized next spring than it is to-day. Events may yet prove that in not a few cases our income and excess-profits taxes are imposed upon income that can never be realized and upon profit that will yet turn into loss. In any case, it is certain that the return of peace renders it necessary for Congress to consider carefully the effects of proposed revenue legislation upon the readjustments which now seem to lie ahead of American industry.

II

CONSUMPTION AND OTHER INDIRECT TAXES

Governments are dependent for their tax revenue, upon two main groups of taxation: (1) taxes levied on property or income, *i. e.*, property in the hands of its owner or in the process of distribution on the death of its owner, and income in the making or in the hands of the final recipient; (2) taxes levied upon specific articles in the process of production or in the hands of the user—the so-called consumption taxes.

There are other subjects of taxation, such as transactions, legal and commercial documents, the pursuit of specified occupations and polls. These, however, play a minor part and find their justification rather in the fact that they can be made to yield a moderate amount of revenue without imposing a serious burden on the individual taxpayer than in any theory of an equitable distribution of the burden of taxation.

The great advantage of the first group of taxes is that they present an opportunity for a distribution of the burden of taxation with some approximation to ability to pay. The great advantage of the second group is that they afford the best means of getting at the tax-paying capacity of people, individually possessing property or income in amounts too small to be effectively reached by property and income taxes, but into whose hands, in the aggregate, passes the greater part of the national income. Regressive in character when taken by themselves, these taxes when combined with property and progressive income taxes constitute an essential element in a well-balanced tax system. They cannot be regarded as unduly burdensome if they are levied not on necessities but on comforts or on articles the consumption of which can be curtailed without real injury or perhaps even with benefit. Their influence in discouraging harmful consumption is in fact an additional point in their favor.

The subjects of taxation best fitted to meet these requirements, and which are consumed in quantities sufficiently large to yield substantial revenue, are few in number. The subjects of taxation may of course be so chosen that the burden will fall on the classes reached by property and income taxes. When so em-

ployed, however, consumption taxes lose their distinctive advantage except in so far as they are used to curtail the consumption of harmful goods. Hitherto in the United States the federal government has derived its tax revenue almost wholly from consumption taxes in the form of duties on imports and, since the Civil War, excise taxes on liquors and tobacco. In time of war the range of federal taxation has been temporarily extended, but even at such times the direct taxation of property or income has played a minor part.¹ The states and local divisions have, on the other hand, relied mainly on the general property tax supplemented in recent years by taxes on corporations and inheritances.²

This differentiation has been due in part to the provisions of the constitution granting to the federal government the exclusive use of duties on imports but restricting its employment of direct taxes by the requirement that they be apportioned among the states on the basis of population. These constitutional restrictions have not been, however, the sole determining factor. The term "direct tax" as used in the constitution had been so narrowly interpreted by the supreme court, prior to 1895, that the federal government was probably free to use any tax other than a tax on polls or on land both of which were ruled out in practice because undoubtedly subject to the rule of apportionment. As a matter of fact, during the Civil War it did levy both income and inheritance taxes and was sustained by the court in so doing. If on the resumption of normal conditions it relied chiefly on consumption taxes in the form of custom duties and excise taxes on liquors and tobacco, it was because these were regarded as legitimate sources of revenue, peculiarly adapted to federal administration, and yielding sufficient revenue to meet the needs of the government. The constitutional restriction was first really felt when, in 1895, the supreme court virtually reversed its position and declared unconstitutional an income tax law enacted for the purpose of supplying a deficiency in the revenue due to

¹ Of the 1,150 millions of tax revenue collected by the federal government between July 1, 1861 and June 30, 1866, over seventy-five per cent came from consumption taxes while not over fifteen per cent came from direct taxes. A comparison of these figures with those in the appendix to this report shows a striking contrast.

² While consumption taxes supplied about ninety-five per cent of the total tax revenue of the federal government in 1913, the census figures of wealth, debt and taxation indicate that they yielded about one-third of the tax revenue of all branches of government.

industrial depression and the reduction of tariff duties. It is however, doubtful, whether, if the law had been sustained, it would have materially altered our system of federal taxation, except possibly during the period of the Spanish War. With the return of business prosperity and a high tariff policy consumption taxes again proved adequate not only for normal, but even for war, needs.

The constitutional restriction, in so far as it affected income taxes, was removed by the adoption of the sixteenth amendment in 1913. An income tax, at a low rate and with large exemption, was therefore immediately enacted under circumstances similar to those of 1894, namely, an anticipated deficiency in revenue due to a reduction of the tariff. It may be safely said, however, that there was little expectation that the new tax would displace consumption taxes as the main source of federal revenue in normal times. It was regarded rather as a reserve power to be employed only in times of emergency. In 1914, the first year of the income tax, consumption taxes yielded 89½ per cent of the total tax revenue. Moreover, it did not necessarily follow that the whole burden even of emergency taxation would be thrown on the new tax. The excise taxes on liquors and tobacco were low¹ and capable of great expansion; the list of articles and transactions subjected to excise taxation could be greatly extended; and imported food luxuries, such as coffee, tea, and cocoa, capable of yielding considerable revenue, were on the free list. These resources had proved adequate to finance the Civil War and the Spanish War and it was natural to assume that they would be again utilized in times of emergency.

Opinion in regard to the income tax had, however, undergone a radical change since the period of the Civil War. Its revenue possibilities were great and it offered distinct advantages from the political standpoint. These advantages however, do not in our opinion justify its exclusive use in meeting a great emergency just as they do not justify its exclusive use in normal times. There is no reason why all classes should not be called upon to bear their fair share of the burdens imposed by a great war, as well as of the normal burden in time of peace. We undoubtedly erred in the Civil War in placing too much of the burden on the

¹ \$1.10 per gallon on distilled spirits; \$1.00 per barrel of 31 gallons on fermented liquors; on cigars \$3.00 per thousand; on cigarettes \$1.25 per thousand; on manufactured tobacco and snuff 8c. per pound.

masses of the people and too little on those of large tax-paying ability. It is possible, however, to err in the opposite direction. If the emergency is so great as to demand the utilization of the tax-paying power of the community to the full, such an error may even prove disastrous by creating a sense of injustice, discouraging industrial effort, and drying up the sources of revenue upon which the Government must rely for the maintenance and increase of its revenue. A well-balanced tax system is desirable even in times of emergency.

Our immediate purpose is to consider: (1) whether in meeting the present emergency taxes other than income taxes, particularly consumption taxes, have been utilized as fully as they should have been; and (2) the part which these taxes should play during the period of readjustment and debt payment.

The outbreak of the European war resulted in a diminution of revenue (through the disturbance in economic conditions) and an increased expenditure by the federal government, thus necessitating legislation for increasing the revenue. The act of October 22, 1914, raised the tax on fermented liquors from one dollar to a dollar and a half per barrel, increased the tax on grape brandy used to fortify sweet wine, and imposed low duties on the following: manufacturers of, and dealers in, tobacco; receipts for freight and express packages; various documents; insurance premiums; telegraph and telephone messages; seats in parlor cars; perfumery; cosmetics and toilet articles; and a limited list of occupations.

By the act of September 8, 1916, the taxes on documents, cosmetics, toilet articles, and telegraph and telephone messages were repealed, and taxes on corporation stock, the profits of munition manufacturers, and the distribution of estates were added. The only consumption taxes increased were those on wines. The additional revenue provided by the increase of consumption taxes in these acts was slight, in fact no more than sufficient to offset the loss in customs revenue following the disturbance in economic conditions which was caused by the war. The net result was that revenue from consumption taxes, together with the new taxes on transactions and occupations, in 1917 exceeded the revenue from consumption taxes in 1914 by only thirty million dollars, or five per cent. Indeed there would have been no excess at all had it not been for the increased withdrawals of distilled liquors due to an anticipated increase in the rates of taxation which did not take place.

The total tax revenue had, however, increased during the interval by 363 millions (equal to 65 per cent), 299 millions of which was derived from the income tax, the remainder (other than the thirty million dollars noted above) coming from taxes on the capital stock of corporations, from the profits of manufacturers of munitions and from estates. Broadly speaking, the deficiency in customs revenue was made good by increasing internal taxes, other than the income tax, while the latter was used to supply the additional revenue needed. In view of the amount of the additional revenue required, this policy was perhaps not open to serious criticism, although the rates on distilled liquors and tobacco might well have been somewhat increased.

Our entrance into the war in 1917 involved an increase of expenditure to a total originally estimated at approximately eight billions, exclusive of advances to our allies. It was determined to provide substantially half of this amount by taxation. This would involve taxes of four billions as compared with 672 millions in 1914 and 1,035 millions in 1917. Such an increase was bound to impose a severe strain on the taxpaying power of the nation. It demanded that the greatest care be taken, in order to secure an equitable distribution of the burden, to avoid hampering productive energy and drying up the sources from which the future increase of taxes must be drawn; and finally to encourage the redistribution of the productive forces demanded for the maintenance and development of the essential industries.

The tax act of October, 1917, provided what, in view of the enormous increase in the total tax revenue contemplated, must be regarded as an extremely moderate advance in the rates of the long-established internal consumption taxes. The rates on distilled liquors were increased from \$1.10 per gallon to \$3.20 per gallon when withdrawn for beverage purposes, and to \$2.20, when withdrawn for other purposes; on fermented liquors from \$1.50 to \$3.00 per barrel. The rates on wine were doubled. For a flat rate of three dollars per thousand on cigars there were substituted rates which varied from four dollars per thousand on cigars retailing between four and seven cents to ten dollars on cigars retailing at over twenty cents. On cigarettes the increase was from \$1.25 to \$2.05 per thousand, and on manufactured tobacco from eight to thirteen cents per pound. Taxes at very moderate rates were also imposed on a variety of beverages, commonly known as soft drinks, on automobiles and motorcycles, on

moving-picture films, on sporting goods, and on a limited list of articles which fall in the class of luxuries. The documentary stamp duties and the taxes on cosmetics and toilet articles, repealed in 1916, were re-established and taxes on proprietary medicines were added. Taxes of ten per cent were levied on club dues, and on admissions to places of amusement. Freight charges were taxed three per cent, express charges five per cent, passenger fares eight per cent, parlor car seats and berths ten per cent, telegraph and telephone messages five cents, when the charge exceeded fifteen cents, and charges for the transportation of oil by pipe line five per cent. Taxes were also imposed on insurance policies and the taxes on estates were materially increased. Import duties were unaltered except in so far as was necessary to compensate the changes in internal taxes. Tea, coffee and cocoa remained on the free list. The combined result of these changes, as shown in the receipts for the year 1918, was an increase from 387 to 600 millions (55%) in the revenue from liquors and tobacco and an increase from 7 to 144 millions from other internal consumption taxes. These increases were, however, in part, offset by a fall of 46 millions in customs revenue, with a resulting net increase in all consumption taxes from 620 millions to 925 millions (49%).

Estate taxes, insurance taxes, and documentary stamp duties, yielded an increase of 56 millions; but the great bulk of the increased revenue was furnished by the income tax and the excess-profits tax (an income tax in the broad sense of the term) which together yielded 2,852 millions as compared with 388 millions from income and munitions profits taxes in the preceding year, an increase of 635 per cent. Consumption taxes, including under this head taxes on transportation and transmission of messages, club dues and admissions to places of amusement, yielded 24 per cent of the total tax revenue as compared with 60 per cent in 1917, and 89 per cent in 1914.

It is open to question whether such disproportionate increases in certain consumption and income taxes were justified and whether the excess-profits tax, in particular, levied in many instances on profits which were merely accounting profits and would become actual profits only if the war should continue, did not threaten to hamper the expansion of industry and to dry up the sources of future revenue. Hundreds of millions of dollars could have been raised by higher rates on liquors and tobacco and by the

taxation of tea, coffee and cocoa, without imposing any undue burden on the classes not reached by the income tax. The fact of this disproportion and the necessity of a more radical increase in consumption taxes seem to have been realized, in some degree, by the House committee in preparing the bill passed in October, 1918. The prospect of the continuance of the war appeared to demand the doubling of the tax revenue. The bill as passed by the House provided an estimated full-year increase of 1,340 millions (112%)¹ from consumption taxes, when compared with the full-year revenue under the act of October 1917, as well as an increase of 2,326 millions² (72%) from income and excess-profits taxes. According to the estimates of that committee, consumption taxes would yield in a full year under the bill thirty per cent of the total tax revenue as compared with twenty-four per cent in 1918, and twenty-six per cent in a full year under the act of October 1917.

This increase in consumption taxes was accomplished mainly by raising radically the rates on liquors (from \$3.20 to eight dollars per gallon on distilled spirits, when used for beverage purposes, and from three to six dollars per barrel on fermented liquors), doubling the rates on cigars and manufactured tobacco, and increasing the rates on cigarettes from \$2.05 per thousand to \$4.10 per thousand on cigarettes retailing for less than two cents and \$5.10 on those retailing at two cents or over. It was estimated that one-half of the total anticipated increase in revenue from consumption taxes as compared with 1918, and two-thirds as compared with a full year under existing law, would be derived from these sources. The remaining increase from consumption taxes was to come from a great extension of the list of luxury taxes, from doubling the rates on admissions and club dues, and from an increase of taxes on soft drinks and telegraph and telephone messages. The most important item in this list were the luxury taxes, which if we include the taxes on gasoline (forty millions) and the license taxes on motorcycles and automobiles (almost seventy-three millions) were expected to yield 591 millions as compared with 37 millions in 1918 and 76 millions under a full year of the existing law. The estate duties were also materially augmented.

¹ This calculation includes, in consumption taxes, custom duties which are not included by the House committee.

² The estimated increase in the income tax was from 1,459 million to 2,376 millions; in the excess-profits tax from 1,791 millions to 3,200 millions.

While the bill recognizes more fully than earlier legislation the necessity of increasing consumption taxes, it might well have accomplished still more in this direction. Taxation of coffee, tea and cocoa, at rates lower than those now in force in Great Britain, and an addition of two cents per pound to the import duties on sugar, with a corresponding excise duty on the domestic product, a still further increase in the tobacco rates and a tax of one per cent on retail sales would probably have yielded over 500 millions. Although the tax on sales is one that ought to be resorted to only in last instance, there is no doubt but that at a time when it was necessary to plan for the utilization of the tax-paying power of the nation to the fullest possible extent such taxes could scarcely be considered as unduly burdensome. They were accordingly well worthy of consideration as a partial substitute for the additional 1,400 millions which the bill proposed to levy on the apparent profits of industry.¹

The House bill however is already ancient history. The problems which we faced in October have undergone a complete change. We are asked to raise for the current year not eight billions but six billions, with the prospect of a steady reduction during succeeding years until our tax system is again adjusted to peace conditions at some level of revenue which cannot yet be more than very roughly estimated as probably between two and three billions.

The immediate problem is still one of increased taxation, but

¹ The English rates per pound on these articles were as follows [The figures outside the parentheses are the peace rates, the figures in parentheses, the existing rates]:

Tea 10c (24c); coffee 4c (9c); cocoa 2c (9c); sugar (98°) 4c (3c). The rate proposed in the present budget is 5.7c. The bulk of our imported sugar comes from Cuba; is between 94° and 96°; and is taxed at rates of 1.23c and 1.25c per pound, less 20%, or about 1c per pound. The rate on sugar between 98° and 99° is 1.334c per pound less 20% or 1.067c per pound. The rates in mind in making the above estimate of possible revenues are: coffee, 7c per pound; tea 16c per pound; cocoa 8c per pound; sugar three times the present rate, with an excise tax of 2c per pound on the domestic product.

These rates on tea, coffee and cocoa might be expected to yield 100 millions and the increased rate on sugar 150 millions. For the possibility of increased revenue from tobacco, see the appendix, p. 62. A tax of one per cent on retail sales might be expected to yield 300 millions. It is not meant to suggest that all these taxes should have been levied at this time, but rather that it would have been wise to provide for additional revenues from consumption taxes, and that such sources of additional revenue were available.

it cannot be entirely separated from the problem of a subsequent reduction; for it will evidently be desirable to obtain revenue for the current year, if possible, from an increase of existing taxes rather than to resort to new taxes, involving annoyance and the likelihood of administrative difficulties, unless they are of a character to be maintained as a permanent part of our tax system. Thus it is doubtful whether it would be wise to adopt the new luxury taxes which are distinctly novel in character, and which might involve considerable difficulties of administration. These can hardly be regarded as a desirable form of consumption taxes in times of peace, since they bear on classes which can be effectively reached through the income tax. The same objection does not hold against the increase of the taxes on liquors and tobacco, proposed in the House bill, since these taxes will unquestionably remain a permanent part of our tax system, unless we adopt the policy of prohibition of the manufacture and sale of liquor. This possibility complicates, of course, the problem of the part which consumption taxes are to play in our fiscal system in the future, and of the forms which such taxes should take. If prohibition becomes the permanent policy of the nation we must face the question whether it is better to provide new consumption taxes to take their place, or to compensate the deficiency by adding to the direct taxes.

Assuming for the present that the manufacture and sale of liquor will continue, it would be wise to adopt the increased rates contained in the house bill and, also, for the current year, the tax on gasoline and the license taxes on motorcycles and automobiles. If this were done and if the income tax rates proposed in the House bill were also accepted, the total tax revenue for the year 1918-19, as estimated by the House committee, would be substantially, six billions,¹ of which the income and excess-profits

¹ Estimated full-year revenue under existing law	\$4,597,000,000
Revenue from increase of income tax	917,000,000
Half-year revenue from increase of taxes on liquors and tobacco	350,000,000
Half-year revenue from gasoline tax	20,000,000
Revenue from licenses on automobiles and motoreycles	76,000,000

\$5,960,000,000

The first figure includes a yield from internal revenue, other than income and excess-profits taxes, of 1,168 millions. The revenue from such sources July 1, to November 5, 1918, was 405 millions, which would indicate that the estimate is being substantially realized.

tax would yield seventy per cent, consumption taxes twenty-eight per cent, and other taxes two per cent. This would make it possible for the excess-profits tax to remain as it is, so far as yield is concerned. But, as has been intimated in another part of this report, it is a serious question as to whether it would be wise to impose such a heavy burden on industries trying to adjust themselves to peace conditions. If the rates suggested were maintained, the full-year yield from consumption taxes, as estimated by the House committee, would be over two billions, of which 1,408 millions would come from taxes on liquor and tobacco, 180 millions from customs and the remainder from the new internal taxes established since 1914. If it should appear that six billions is in excess of the amount needed, reductions might be made in the excess-profits tax, in the rates proposed for the income tax, or in the consumption taxes.

If reduction is to be made in the consumption taxes, it seems advisable that it take place in those taxes which are not to be permanently retained. Within this class would fall the taxes on transportation, since they impose a burden on essential industrial processes; taxes on luxuries, admissions, club dues, gasoline and automobiles, since they bear mainly on classes reached through the income tax; and for similar reasons, and because the yield is small in proportion to the annoyance caused, taxes on telegraph and telephone messages. It is questionable also whether the federal tax on estates should be continued, at all events at the suggested high rates, in view of the large and increasing use of this tax which is being made by the states. This brings up, however, the question of the relation of state and federal taxation, which lies beyond the purview of the present committee. Finally, there does not seem to be any valid reason why insurance, or brokerage, should be selected for taxation by the federal government. There may be some reason for the retention of documentary stamp duties, which yield a substantial amount of revenue while imposing a very slight burden; and, if these are to be levied at all, they should be levied at uniform rates throughout the country.

The amount of tax revenue needed will certainly show a marked decrease in 1920, and will continue to decline until a permanent peace adjustment is reached. Consumption taxes would naturally share in the reductions to be made. If the reductions should follow the lines sketched above, there would finally remain

the taxes on liquors and tobacco, taxed at the rates suggested in the House bill (yielding according to the committee's estimate 1,408 millions), and the customs duties. This will be virtually the same system as that which existed before the war. Customs duties could probably be counted on to yield not less than two hundred millions, giving a total revenue from consumption taxes of about 1,600 millions.¹ It is not improbable that, as a result of the higher level of ordinary expenditures after the war, this sum will just about suffice to meet such expenditures, as did the revenue from the same sources before the war. If income taxes (in the form of the income tax proper or the excess-profits tax) should be levied in quantity sufficient to care for the interest and principal of the debt we reach an adjustment under which that portion of the war burden represented by the increase in normal expenditure would be borne by consumption taxes, while the portion represented by accumulated debt would be borne by income taxes. While too much emphasis must not be placed on this perhaps fortuitous consequence, the resulting distribution would not be unfair, especially if consumption taxes, other than customs, were imposed on liquors and tobacco. High taxes on these articles at all events would not be an excessive contribution for the masses of the people to make as their share in the burden of the war.

This proposal of course loses its force if the prohibition of the manufacture and sale of liquor is to become our national policy in the immediate future. Such a policy would reduce the revenue from consumption taxes under the plan proposed by nearly 1,100 millions. To supply new consumption taxes sufficient to make up this deficiency would be extremely difficult. As already indicated, taxation of what are commonly designated as food luxuries, such as tea, coffee, cocoa and sugar might yield 250 millions,² and some additional revenue might be derived from tobacco, the rates on which, particularly on cigars and manufactured tobacco, proposed in the House bill, and contemplated in the calculations of revenue made above, are still well below the rates which have been imposed in England in times of peace.³

¹ It is possible that distilled liquors may be found to be taxed above the maximum revenue rate and may not yield the revenue anticipated. Whatever deficiency may develop, however, could probably be made up from additional taxes on tobacco. See appendix, p. 62.

² See note, p. 56.

³ See appendix, p. 62.

These taxes however, would supply only a fraction of the loss, and it is doubtful whether the increase in the taxation of sugar would be justifiable as a permanent policy.

Liquors have met, in an exceptional degree, the requirements of an article suitable for consumption taxation and, in countries which make use of such taxation on a large scale, have been a main element in the system. If they should disappear, it may mean that consumption taxes will sink to a position of minor importance. To this aspect of the question the committee has been unable, because of lack of time and the sudden recent change in the situation, to give sufficient attention to venture an opinion.

In concluding this part of the report, your committee desires to call attention to the fact that it has assumed a form somewhat different from that which would perhaps have been desirable. What the committee originally had in mind was, in addition to presenting the facts and the considerations that have been recounted above, to make a more detailed study of the actual operation and effects of our system of indirect taxes and also to study more at length the general problem of the future relations of direct and indirect taxation, not only as a question of fiscal theory but also with reference to the particular situation of the United States. The accomplishment of these objects, however, has been rendered impossible by the shortness of the time that has elapsed since the taxes were put into operation, as well as by the confusion engendered by the sudden cessation of hostilities together with the possibly near approach of prohibition. Under these circumstances, the committee has deemed it best to limit the discussion to the points mentioned in the report. The other topics are sufficiently important to warrant a careful study by a future committee, if the Association should deem it wise.

APPENDIX
TAX REVENUE
(in millions of dollars)

	1914	1917	1918 ¹	Existing Law ²	House Bill ²
I. Consumption Taxes					
Internal					
1. Distilled spirits (incl. wine) ..	159	192	318 }	495 ³	{ 827
2. Fermented liquors.....	67	92	126 }		
3. Tobacco	80	103	156 }		
Total 1-3.....	306	387	600	707	1408
4. Transportation .....	....	....	64	164	165
5. Telegraph and telephone mes's	....	....	6	14	16
6. Luxuries .....	....	....	37	76	591 ⁴
7. Admissions and club dues ....	....	....	29	55	109
8. Other	2	7	9	5 ⁵	71 ⁵
Total 4-8.....	2	7	145	314	952
Total 1-8.....	309	394	745	1020	2360
Customs duties.....	292	226	180	180	180
Total I.....	601	620	925	1200	2540
II. Income Taxes					
Individual.....	28	180	2852	{ 930	1482
Corporation	32	180			
Total	61	360		1459	2376
Excess-profits tax ⁶	11	28	25	1791	3200
Capital stock tax .....	....	10		25	70
Total II.....	72	398	2877	3275	5646
III. Estate Tax					
Insurance taxes .....	....	6	47	75	110
Stamp taxes (documents) .....	....	18	6	12	12
Other taxes .....	....	3	18	32	32
Total III.....	....	17	3	4	23
Total I-III.....	672	1035	3875	4597	8362
Percentage of consumption taxes.....	89	60	24	26	30

¹ Preliminary Statement, September 14, 1918.

² Estimated full year yield. *House Report no. 767, 65th Congress, Second Session*, p. 40. Certain minor revenues are omitted from this estimate. There has been added to the committee's estimate receipts from customs as given in the daily treasury statement June 29, 1918.

³ Estimated; "beverages" less estimated five millions receipts from soft drinks. The revenue from this source was \$2,215,000 in 1918.

⁴ Includes taxes on gasoline (\$40,000,000) and license taxes on motorcycles and automobiles (\$72,930,000).

⁵ Soft drinks.

⁶ The entry for 1914 is for excise tax; for 1917, munitions profits tax.

RATES ON LIQUORS AND TOBACCO IN GREAT BRITAIN AND THE UNITED STATES

DISTILLED SPIRITS			
(Per gallon)			
	<i>Pre-War</i>	<i>1918</i>	<i>Proposed for 1919</i> ¹²
Great Britain.....	\$3.58	\$3.58	\$7.29
United States.....	1.10	3.20	8.00
FERMENTED LIQUORS			
(Per barrel of 36 gallons in Great Britain)			
(Per barrel of 31 gallons in United States)			
Great Britain.....	\$1.88	\$6.08	\$12.15
United States.....	1.00	3.00	6.00
CIGARS			
(Per pound in Great Britain. Per 1000 in U. S.)			
Great Britain ⁷	\$1.70	\$2.98	\$3.79
United States ⁸	3.00	4.00 to 10.00	5.00 to 20.00
Estimated equivalent per pound ⁹ ..	.25	.50	1.00
CIGARETTES			
(Per pound in Great Britain. Per 1000 in United States)			
Great Britain ⁷	\$1.38	\$2.41	\$3.08
United States ¹⁰	1.25	2.05	4.10 to 5.10
Estimated equivalent per pound ¹¹ ..	.45	.78	1.67
MANUFACTURED TOBACCO			
(Per pound)			
Great Britain ⁷	\$1.13	\$1.98	\$2.52
United States.....	.08	.13	.26

⁷ The rates for Great Britain are import duties. There are no excise duties on the manufacture of tobacco. Practically all the tobacco manufactured is imported. The tax levied on the importation of raw tobacco is the base rate. The import duties per pound on the various forms of manufactured tobacco are fixed to compensate the home manufacturer for the duty on the raw material and the waste in manufacture, and correspond, therefore, to the rate per pound the manufacturer would pay if taxed under the excise. Thus the duties on manufactured tobacco are 1.27 times, the duties on cigarettes 1.55 times, and the duties on cigars 1.91 times the duty on raw tobacco. There may be a slight element of protection in these rates. In so far as this is the fact the rates given for the domestic manufacturer are too high, but the error is certainly slight, and, so far as they affect the comparison with the United States, are probably more than offset by the conservative estimate (see notes 9 and 11) of the weight of cigars and cigarettes, and their average selling price, in the latter country. The peace rates on raw tobacco containing more than 10% moisture were 89 cents in pre-war times, \$1.56 in 1918, and \$1.99 in the present budget.

⁸ These are the rates on cigars weighing over 3 pounds per thousand, which furnish the great bulk of the revenue.

⁹ It is assumed that cigars average 12 pounds per thousand, certainly conservatively low, and that the average retail price is between 7¢ (8¢ under House Bill) and 15¢, certainly conservatively high. The rate on cigars retailing at these prices is \$6. The rate in the House bill is \$12.

¹⁰ These are the rates of cigarettes weighing less than 3 pounds per thousand which furnish the great bulk of the revenue.

¹¹ It is assumed that cigarettes weigh 2½ pounds per thousand, and that the average rate under the House Bill would be \$4.60 per thousand.

¹² Great Britain, budget of April, 1918; United States, House bill.

III

FEDERAL LAND AND CAPITAL TAXES

The problem of land and capital taxes can best be considered as involving two separate questions, (1) should the federal government impose taxes on land or other forms of capital (*i. e.*, property taxes) in time of war as a measure of war finance, and (2) should taxes on land or other forms of capital or a "capital levy" be used after the war as a means of raising funds to extinguish or to reduce the war debt?

I. FEDERAL PROPERTY TAXES AS A WAR MEASURE

Discussion limited to the fiscal problem. In regard to the first question, it is believed that the subject should be approached from the point of view of the needs of war finance. Various lines of argument may be proposed in favor of federal taxes on land or on other forms of capital. Taxes on land alone would be approved by those who favor the single tax or the nationalization of the land. Taxes on capital generally might be favored for the purpose of bringing about a redistribution of fortunes or a greater equality of wealth. The discussion of such arguments is believed not to be pertinent to our present inquiry. The question before us is as to the most equitable and convenient means of raising funds to meet war expenses. A war emergency should not be utilized to promote any project which, given proper time and discussion, would not command approval on its merits; and it is submitted that the exigency of a war is not the time for adequate discussion of the merits of plans for altering the distribution of wealth or the control of industry. It should further be kept in mind that such matters of social reform affect the interests of the states at least as closely as they concern the federal government.

Confining itself, therefore, to fiscal considerations, the committee is of the opinion that the first question should be answered in the negative, that is, that the federal government should not adopt as a war measure the policy of taxing property.

The following is an outline of the grounds upon which this decision is based.

The constitutional problem. First of all, there arises the constitutional problem. Taxes on land and other forms of capital are to be construed as direct taxes and as such could under the present constitution be collected by the federal government only if distributed among the states in proportion to their population. The injustice of this rule of apportionment has appeared clearly on each of the occasions when the United States has levied direct taxes. The inequity of the direct tax of the Civil War was so obvious that Congress even undertook after the war to return it to the states. In each case, moreover, the yield of the tax was slow in collection and disappointing in amount. This has been investigated by numerous students, with the invariable conclusion that revenue can be obtained under the present rule of apportionment only at the cost of serious inequality as between different parts of the country, and that the attempt to secure any large yield by this method would produce such glaring inequality as to be intolerable.

The undesirability of attempting to impose any form of property tax under the present constitutional rule of apportionment is thus demonstrated. But, it may be asked: should the constitution not be amended so as to permit the imposition of such taxes without reference to distribution among the states according to population? There may be arguments in favor of thus removing one of the restrictions upon the taxing power of Congress. We do not deem it necessary to enter into the question here, for the reason that the time required for amending the constitution would probably be so great as to preclude any immediate use of this device.

Interference with state and local tax system. Entirely apart from the constitutional question, one of the strongest arguments against federal property taxes in time of war is that they would invade the field of state and local taxation, with serious if not disastrous results. Throughout the history of the United States the states and their subdivisions have generally been left in possession of the field of direct taxation, whereas their use of indirect taxes has been from the start narrowly restricted by the federal constitution. Yet in spite of almost exclusive rights in the domain of direct taxation the states and local governments have found it increasingly difficult to raise revenue to meet their

growing needs. Moreover, the federal government has of late years made inroads upon the tax domain of the state and local governments. Not only is the inheritance tax a case in point, but the income tax has recently become the mainstay of the federal revenue system. It is true that before the adoption of the federal income tax in 1913 the states had made practically no successful use of this tax. The future, however, is likely to see increasing use of income taxes by the states and this development will now have to take account of the strongly entrenched position of the federal government in this domain. With the present high rates of the federal income tax, the invasion of the field of property taxation by the national government might have serious effects upon the states and their local subdivisions.

If it be urged that during time of war the national government should take precedence and that the activities of other governments should give way where necessary, the answer is that the interests of the nation as a whole are bound up in all grades of government in time of war as well as in time of peace, and that any serious curtailment of the functions of state and local governments would in a short time be felt as a veritable disaster. Without attempting to discuss this matter in all its ramifications, the following suggestions are offered:

A good illustration seems to be the schools. Schools are essential to democracy during war as well as in peace. Practically everywhere, however, in the United States the school revenues are derived from the direct tax on property. This source of revenue would be attacked by a federal direct tax.

In England and still more so in France the schools at the beginning of the war were allowed to be crippled. Male teachers went into the ranks and female teachers into other lines of war work, while school buildings were taken for war purposes. Both countries, however, soon awoke to the fact that it was dangerous to lessen the education of the rising generation. A boy of thirteen becomes an available fighting man in five years; an intelligent man makes a better soldier than an ignorant one. Moreover, the schools are necessary to the permanent maintenance of a high grade of civilization—the very thing for which we have been fighting. Hence both England and France soon made strenuous efforts to restore the school system. President Wilson himself also urged the continued maintenance of the schools during the stress of war. The schools unavoidably suffer from the proper

and necessary draft on the teaching force by the enrollment of the younger teachers in war work. Their revenues should, however, not be curtailed unless in the last extremity.

Other state and local activities may not be quite so vital. But roads and streets are essential to the production and distribution of food and other necessities. The upkeep of the departments of health is necessary to maintain physical efficiency. Police and fire protection, justice and the courts, are needed in war as much as in peace.

It is doubtless true that some economies can be made in state and local expenditures in war time. But the federal government should drain its own resources to the uttermost before it taps the sources of revenue of the states and cities. The maintenance of state and local activities is as essential to sound democracy during the war as after the war.

Administrative difficulties. Another objection to the use of federal property taxes in war time is to be found in the difficulties of administration. The assessment and collection of such taxes would have to be handled either through the existing administrative machinery of the state and local governments or by a newly created federal organization. If the states should administer the tax there would be the utmost lack of uniformity, resulting in gross inequality as between different parts of the country. It is well known that the states have made anything but a success in the administration of the property tax. If, on the other hand, the federal government should undertake to build up an organization for administering the property tax, several objections at once occur. In the first place, it is doubtful whether the federal government would succeed any better than the states have done. There are indeed some considerations which would favor the efficiency of a national administration: for instance, the various interstate complications, which are a thorn in the side of the state property tax, would largely be removed. On the other hand, the valuation of land and property so peculiarly requires minute local knowledge that the national administration would contend against a serious handicap from the start. Furthermore, whatever might be hoped from a perfected federal assessment machine, there is no reason to suppose that such a machine could be built up and function successfully in time to make its results of vital importance in the financing of the war.

Conclusion. In the foregoing arguments, land and other

capital taxes have been treated together under the general head of property taxes. It has not seemed necessary to examine the arguments separately with respect to taxes upon land or other special kinds of capital. The argument for a tax upon land alone would gain strength from the fact that the difficulties of assessment are less than in the case of many other kinds of capital. On the other hand, it would be difficult to defend the injustice of thus singling out a particular form of capital for special war burdens, above all as land is among the few kinds of property which except in certain specially proved localities have not shared in the general rise of prices resulting from the war.¹

In conclusion, it appears that the logic is against the use by the federal government of taxes upon land or other forms of capital as a war measure. It is indeed conceivable that as a last resort the government, reaching out for every possible source of revenue, might obtain a considerable income from taxes on property. The United States, however, was far from reaching any such extremity during the war. Enormous revenues were obtained from sources better fitted to the exigencies of the situation, and the possibilities of these and other similar taxes had by no means been exhausted. As a war measure there is every reason to reject the federal taxation of land and capital.

II. PROPERTY TAXES AFTER THE WAR AS A MEANS OF PAYING THE WAR DEBT

The second question to be investigated has to deal with the possible imposition of land or capital taxes or a "capital levy" after the war as a means of raising funds to extinguish or to reduce the war debt. The traditional policy of America has favored the prompt payment of war debts. Among the many financial problems facing the nation after the Revolution, that of making provision for the speedy extinction of the national debt was generally recognized as especially urgent. After some vicissitudes, the Revolutionary debt, increased by that of the War of 1812, was practically paid off in 1835. In like manner, after the Civil War the country set to work at once to reduce the three billion dollar war debt, a stupendous amount for those times, and within a generation the debt had been more than two-thirds paid. Had it not been for the unfortunate relation between the public

¹ As to this point see the discussion below in the section devoted to the fiscal aspects of bank credit and the currency.

debt and the national banking system, it is quite conceivable that this policy might have proceeded to the complete extinction of the national debt before the outbreak of the present war. There is every reason to believe that American public opinion will, immediately after the close of the present war, demand energetic measures looking toward the immediate reduction of the public debt and its ultimate disappearance within a reasonable time. This sentiment is supported by sound economic principles, which it is unnecessary to state at length.

For the payment of the public debt taxation is the means upon which the country must rely, and for some years after the present war the nation must expect to bear a heavy burden of taxation in order to meet interest on the debt and to provide for its speedy reduction.

The main question before us may conveniently be divided into two parts, of which the first is this: in the federal tax system of the generation following the war, shall reliance be placed upon the sources already in use, or shall new taxes on land or other forms of capital be added?

1. Property taxes as part of the regular federal tax system

The discussion of this problem involves the same line of argument as that which has already been presented in considering the problem of the immediate use of land and capital taxes as a war measure, with the exception that considerations based on the necessity of immediate action disappear. The problem could be considered after the war deliberately and in all its aspects. On the other hand, the arguments against such taxation based upon the evil effects of invading the tax field of the states and local governments and upon the administrative difficulties thereof remain with well-nigh undiminished force. Although the weight of the argument is distinctly against such taxes, we are not prepared to advance so unqualified an opinion against the future desirability of federal land and capital taxes, as we are with regard to their use as a war measure. We believe that the practical consideration of this problem should properly be deferred until after the resumption of normal conditions. It might be advisable for the American Economic Association to conduct later a thorough study of this question with a view to securing the data necessary for the expression of an authoritative opinion at such time as the matter may come up for practical consideration. At

the present moment, however, we have not felt called upon to endeavor to go exhaustively into this question.

2. *The capital levy*

A second question relating to post-bellum finance which is at present attracting some attention, has to do with the advisability of imposing what may be called a capital levy as a means of redeeming the whole, or a considerable portion, of the war debt. So-called capital levies have been already imposed in Germany and Switzerland. The proposition has received serious consideration in Austria, France, and particularly in England, where it has attracted much notice in the economic and other journals and has received the attention of members of the government. While the subject has not thus far aroused much interest in the United States, it is altogether likely that it may come into prominence in connection with the discussion of post-bellum financial measures. The question, therefore, deserves consideration.

General character of the capital levy. Briefly stated, the plan of the capital levy involves an extraordinarily heavy imposition made once for all, laid either upon all kinds of capital or upon certain specified kinds. The capital levy is to be distinguished from a property tax on the ground that it is a single levy imposed once for all (though possibly paid in instalments) and of an amount too great to be paid conveniently from current income or borne as an annually recurring tax. Examples are to be found in Germany, as in the case of the *Wehrbeitrag* of 1913 and the *Kriegsteuer* of 1916 with the amendment of 1917, and in Switzerland, where a national property tax was levied in 1913. Strictly speaking, these taxes were not heavy enough to deserve the title of capital levy, and moreover in the case of Germany the promise of non-recurrence has not been kept. However, responsible German writers have expressed the opinion that great use must be made of the capital levy in solving Germany's financial problem after the war.

On account of the obvious injustice of singling out certain kinds of capital for such heavy exaction we are justified in considering only the general levy upon practically all forms of capital. In collecting the tax the government would presumably accept not only payments in money, but payments in government bonds and possibly in certain corporate securities. Bonds so received would be cancelled forthwith and corporate securities would

either be held by the government in order to obtain control of national industries and to use the profits therefrom for liquidation of the public debt, or else would be exchanged with the citizens for government bonds, which would then be cancelled. Such a capital levy, equal in amount to the entire public debt, would, on the assumption that the corporate securities received were sold or exchanged for government bonds, obviously result in the cancellation at one stroke of the entire public debt. The slate would be wiped clean, the government would be relieved of further interest charge, the annually recurring taxes could be greatly reduced, and business could proceed without the necessity of further heavy taxation in order to defray the burdens of the past war. A smaller exaction would realize these results in part.

Discussion limited to the fiscal problem. In the discussion of this project, arguments have been offered in its favor based upon the desire to secure a different distribution of wealth or an increased control of industry by the government. Advocates of the single tax would also approve of such a levy if it should tend to result in government ownership of the land. Inasmuch as these are all large social questions we feel that it is out of the question to give them adequate study and to present positive conclusions in the time at our disposal. In fact, there is reason to doubt whether these questions are properly before a special war finance committee. We believe it best, therefore, to devote our inquiries solely to the fiscal considerations involved.

The capital levy vs. repudiation. The weightiest fiscal argument urged in its favor is that the capital levy offers a way of escape to a nation facing otherwise the necessity of repudiation of its public debt. In other words, a capital levy is better than repudiation. As to this, there would seem to be little question. Repudiation puts the whole burden upon those who have subscribed for the public debt. Such an act, flagrantly unjust at any time, would be particularly unworthy of a government which had made such extensive use of the appeal to patriotism in soliciting subscriptions to war bonds as has been done by the United States in this war. Repudiation is, of course, also a disastrous blow to national credit and an admission of fiscal collapse. Without going further into the argument, the mere fact that the capital levy presumes to place the burden upon all capital and does not single out the holders of government bonds establishes its superiority over repudiation. These arguments, however, are really beside

the point so far as the United States is concerned. Whether or not other nations, strained to the breaking point by the burdens of war, may see repudiation staring them in the face, the United States is certainly in no such position. Our ability to pay interest on our war debt and to redeem the principal by means of orderly financial measures is unquestioned.

As war insurance. A similar argument is to the effect that a capital levy for extinguishing the past public debt is advisable as an insurance measure against possible future war. By submitting to this levy, the argument runs, the nation would be financially prepared for further struggles, should they be necessary. This argument is inapplicable to the United States for the reasons given above. Unless a nation is really bankrupt, a heavy capital levy would be the worst possible preparation for future war, and the United States has not begun to approach the point where such action would be a necessity.

To prevent evasion of income taxes. The capital levy has been advocated in order to provide a means of reaching those citizens who seek to evade income taxes by investing their wealth in forms of capital which are temporarily unproductive. Undoubtedly the capital levy would impose a heavy burden upon such evaders, but it is a burden which would fall alike upon the just and the unjust. This alone is enough to render the capital levy unendurably obnoxious even though there is a possibility that the process of capitalization might mitigate to some degree the injustice done to the innocent owner of unproductive property who bought previous to the war without thought of tax evasion. To be most effective as a punitive measure and most successful as a deterrent, the capital levy should be closely synchronized with the income tax, *i. e.*, the levy should be imposed when the change is made in the income-tax rates from the war level to a lower level. Of course if income-tax rates were to remain high for a generation or two, there would be no excuse for a capital levy to punish or to prevent evasion. This fact might form the basis for an argument of some importance in favor of maintaining a high level of income-tax rates for a considerable period following the war. There is, therefore, some force to the contention that the capital levy would prevent evasion, but it is doubtful if it is as strong as it appears to its advocates, and it is apparent that there is not enough of merit in this argument to offset the extraordinary practical difficulties in the way of the imposition of the capital levy to which we shall now call attention.

Administrative difficulties. All the administrative difficulties inherent in the federal property tax as already discussed would be present to an intensified degree in connection with the capital levy. The great difficulty with all property taxes lies in the discovery and valuation of property. These difficulties have been the main cause of the break-down of the American property tax and it is essential to point out that these difficulties grow, and at an increasing rate, with the weight of the tax. There is reason to believe that some European countries have made a success of certain forms of property tax where the rates have been very low. Undoubtedly one of the reasons for the failure of the American property tax is to be found in the high rates at which it is imposed. But even the ordinary rates of the American property tax would appear insignificant when compared with the rates at which a single capital levy would have to be imposed in order to raise funds to pay off the whole or a great part of the public debt. The inequalities and injustices notoriously resulting from such property taxes as are now levied by our states and local subdivisions would be grossly intensified, the motive to evasion would be irresistible, and the difficulties of assessment overwhelming. Furthermore, the character of the capital levy as a single exaction once for all would intensify its inequality and injustice. The burden of the regularly recurring property tax, whatever its evils, tends to be softened by the very fact of its regularity. Taxes are capitalized; allowance is made for the inequality of tax burdens upon different kinds of property; and in the course of years some of the rough edges are worn off. Nothing of the sort would be possible in the case of the once-for-all capital levy, which would descend with crushing burden and cruel inequality.

Effect upon business. To determine the comparative effects upon business of continued heavy taxes along present lines and the once-for-all capital levy is a difficult problem. Without doubt, relief from the burden of heavy future taxes would be a boon to business. On the other hand, there is little reason to doubt that many business men and corporations would be unable to endure the sudden burden of the capital levy after the war. That the burden would fall unequally and with much injustice does not strengthen the argument for the capital levy. In the years immediately following the war, business will have to pass through a readjustment, the character and seriousness of which can not now be foreseen. The sudden imposition of a heavy capital levy at this time might prove a disastrous blow.

The constitutional question is the same as that which has been discussed above. Unless by some legal quibble the capital levy were to be defined as something other than a direct tax, which seems altogether unlikely, it would under our present constitutional rule have to be imposed in proportion to the population of the states. This would cause such gross injustice and so greatly limit the possible amount to be raised as to preclude the capital levy from serious discussion. If the capital levy is to be used, the constitution must first be amended. The argument based upon the time required for amendment, however, is here of little weight. If it should be decided, on the merits of the case, that the capital levy was advisable, this particular difficulty could probably be adjusted by an amendment to the constitution.

Penalty upon saving. Against the capital levy it may further be urged that it would be a penalty upon saving. This argument would perhaps have little force if there were any way in which the public could be guaranteed against a repetition. Obviously there is no possibility of such a guarantee, and the very fact of resort to such a levy for the first time in the history of the nation would certainly arouse fear as to the future.

Effect upon other taxes. The capital levy, in so far as it would tend to reduce capital in the hands of the citizens, or to diminish its productivity, would have a tendency to impair the base upon which the present tax system rests. In particular, the income tax, at present the mainstay of the national tax system, would be likely to suffer.

Effect upon public expenditure. An interesting and important phase of the capital levy is its probable effect on public expenditure. The ever-present tendency toward extravagance is apt to be particularly strong in the years following a costly war. One of the few favorable considerations that can be urged for the burden of interest which our government must shoulder after the war is that the heavy taxes necessary for its payment will tend to curb extravagance in other lines. Extinction of the debt by means of the capital levy would remove this check, and it is not improbable that the promised reduction in future taxes, for which the capital levy was the price, would be forthcoming only in part.

Relation to tax-exempt liberty bonds. Finally, there is a consideration which, of itself, would seem to make the capital levy practically impossible in the United States. All of the present war debt has been issued with the explicit promise of exemption

from all taxation, excepting estate or inheritance taxes, upon the principal of the bonds. Apparently, therefore, there is no way in which the capital levy can be imposed upon capital in the form of liberty bonds except by what would amount to a virtual repudiation of the government's contract with the lenders. To impose a capital levy from which holders of government bonds would be exempt in order to obtain funds for the immediate payment of those bonds would be a procedure so unjust as to preclude its consideration by serious and fair-minded students and to make its adoption politically impossible in the face of the popular wave of protest which it would arouse. It will be remembered that during the generation following the Civil War widespread popular feeling was aroused against the holders of government bonds on account of their favored position due to the exemption of their securities even from the ordinary tax levies, an exemption to which they were entitled by their contract and which was clearly foreseen at the time of the creation of the debt. It is quite possible that some such feeling may arise in the immediate future in connection with the tax-exempt feature of the liberty bonds of the present war. If, however, the government should proceed to impose a capital levy, granting an enormous and unforeseen advantage to bondholders, the popular cry of indignation can scarcely be imagined. This fact alone would appear on its face to be sufficient to settle the question.

Conclusion. It is realized that the foregoing analysis is far from exhaustive, but it reveals so many serious objections to the capital levy that we do not hesitate to report that in our opinion such a measure has no proper place in a financial plan for a country in the present position of the United States. As an alternative to repudiation in a country on the verge of bankruptcy, something can be said for the plan. For a nation solvent and unembarrassed, it possesses no attractions.

IV

PUBLIC CREDIT

1. *Introduction.* Public credit is a part of general credit. While it differs in several important respects from private credit, it is nevertheless subject to the same general conditions and limitations. Public credit, like private, is based in last analysis upon the confidence of creditors in the ability and the purpose of the debtor to fulfil his contract when it falls due. It implies in its very nature an appeal to trust and therefore rests, not upon coercion or the power of government, but rather upon the confidence of the citizens in the promises of the state.

The employment of credit by the modern state is not a war measure only, but is a normal incident in the fiscal practice of every nation. It performs a valuable service by bridging over the gap of a deficit between alternating periods of surplus revenues. In the case of a sudden emergency like war, with its immediate enormous demands, the function of credit is to make available for the government at once the financial resources of the country without waiting for the slower processes of taxation. But it must always be borne in mind that ordinarily the use of credit is simply to anticipate the later revenues from taxation or industrial undertakings. The determination to use public credit for any expenditure must assume the desirability of the expenditure itself. Given this, the choice is simply between the use of credit or of taxation.

In the case of the gigantic expenditures of the present war it is, however, scarcely correct to say that there was a choice between these two. It was necessary at the outset to make use of credit on a hitherto unknown scale. But at the same time, in accordance with the most approved financial practice of providing a sound basis for public credit, the scope of taxation was greatly extended. Both means of providing the necessary revenues have been employed. The unwisdom of too exclusive a dependence upon loans has been illustrated in the past fiscal history of the United States and in the experience of some of the

European nations in the present war. On the other hand, the impracticability of collecting by taxation alone the enormous sums called for by modern military expenditures is shown by the fact that neither England nor the United States has ventured to raise more than about a quarter of its war expenditures, inclusive of loans to Allies, by this method. The maintenance of credit upon a sound basis, however, as well as justice to future generations, demands that the revenues from taxation be increased so far as possible with the progress of the war. Upon this point the policy of the United States in the present war must be commended.

2. *Anticipatory loans.* A conspicuous feature of our war financing has been the large and continuous use of Treasury certificates of indebtedness issued in anticipation of the proceeds of the Liberty loans and, to a less extent, of income and excess-profits taxes. During the nineteen months of our direct participation in the war no less than thirty-one such issues were emitted to an aggregate nominal volume of \$12,687,524,000. The war has thus been very largely financed, in so far as reliance has been had upon public credit, from the proceeds of certificates of indebtedness periodically funded into, or liquidated out of, the proceeds of funded loans.¹

The use of short-term anticipatory borrowing at the outset of a period of extraordinary financing to supply ready funds until established sources of revenue become productive is a familiar and accredited expedient. But the habitual use of such a device to supply the Treasury with current funds was, at least in the experience of the United States, an unfamiliar and untested policy. The adoption and pursuit of this policy by the United States must be regarded as deliberate rather than inevitable. It would have been possible for the Treasury, at any stage of its war financing, by earlier recourse to funded borrowing or by the issue of large loans or by more frequent flotations, to have supplied itself with sufficient margin to have made anticipatory borrowing unnecessary.

As actually employed, the certificate method has been more costly than installment-payable loans to the extent that the certificates have borne higher rates of interest than the corresponding Liberty loans. It has necessitated the virtual

¹ For a detailed study of this matter, see Hollander, *War Borrowing: A Study of Treasury Certificates of Indebtedness of the United States*. (In press.)

renewal and extension of short-term loans in so far as the maturities of one cycle have overlapped the issues of another, with the ever-present possibility of embarrassment in refunding operations. But most important of all, it has taken the form, to a very large extent, of newly created credit advances made by the banks to the Treasury in the shape of government deposits and has thus added not a little to that inflation of credit which it has been the avowed policy of the Treasury to prevent.

3. *Technique of borrowing.* (a) *What form shall the public debt take?* The choice between temporary debts and long-time bonds was from the first resolved in favor of the latter, and the mistakes which characterized the policy of Secretary Chase in the Civil War were avoided. Warned by the enormous expenditures of the European belligerents and the possibility of a long continued struggle, the United States has issued no obligations—other than certificates of indebtedness just described and war savings stamps—for a shorter period than ten years from the date of issuance. There was thus avoided at least the danger that the debt would fall due during the continuance of the struggle itself.

Having decided upon bonds rather than upon short-term notes, the next problem which confronted the Treasury was the kind of bond to be issued. In conformity with American practice the Treasury rejected a bond running in perpetuity, like the French *rentes* issued during the present war, and chose instead one running for a limited term. But of securities of this description at least four presented themselves for consideration. These were annuities, serial bonds, optional bonds, and bonds for definite periods.

Annuities have not for over a century had any vogue in the United States and were not seriously considered in the present war. At least two weighty reasons for their rejection may be mentioned. Providing as they do for fixed annual payments during the life of the obligation, they are open to the objection that they preclude a refunding, by which advantage may be taken of every fall in the rate of interest. And in the second place, inasmuch as the government may be under the necessity of further borrowing during the life of the contract, it may be very inconvenient to make the annual payments on the principal.

Against the serial bonds essentially the same arguments may be directed. As these bonds are paid in series immediately after their creation, the machinery of a sinking fund is at once called

into existence for this purpose. This is entirely legitimate in the case of an investment loan for a productive enterprise, the earnings from which provide the fund out of which the debt may be liquidated; or in the case of regularly recurring expenditures of a state or municipality which will be defrayed out of subsequent tax revenues. Thus serial bonds may properly be used by an industrial corporation or by a state or local government. But for the national government they are ordinarily quite inadmissible. In the first place the purposes for which the national government uses its credit are generally of an emergency character, and not for productive investment. An agency which may have to finance a war cannot afford to have its hands tied by the falling due of a debt whose payment is compulsory. In this respect the effect of the serial bond is like that of the now discredited sinking-fund policy, in that it compels payment of the debt even when the government is borrowing. Secondly, the serial bond prevents more rapid payment when larger surplus revenues make such action possible. Finally it precludes the refunding of a debt at lower interest rates when these decline. The conclusion may therefore be drawn that serial bonds are not suitable for purposes of war finance by the national government.

The "optional" bond is an American device, introduced into this country by the act of February 25, 1862, providing for the issue of 500 million five-twenty bonds. These were redeemable after five, and payable after twenty, years from date. They derived their name from the double choice offered the government as to the time of payment. This form of bond has been the favored one in the present war. Certain objections may, notwithstanding, be cited against the optional bond. It is often urged that it is needlessly expensive, since a long-term bond can be sold at a higher price than one of shorter maturity bearing the same rate of interest—an advantage which is lost by the introduction of a short term after which it is redeemable. Moreover, the sacrifice thus made does not necessarily permit the government to avail itself of the earlier date. In the case of the five-twenties of 1862, the process of refunding at a lower rate of interest began about ten, and was completed about fourteen, years after the date of issue. A straight ten-year bond would have been preferable in this instance. The fixation of a final date of repayment offers no guarantee of payment of the debt, for it may be merely refunded. And, finally, it introduces an unnecessary element of complexity into the composition of the national debt.

On the other hand, certain merits of this form of bond may be mentioned. Perhaps the most conspicuous advantage is the fact that it furnishes an earnest of the intention of the government to attack the payment of the debt as promptly as possible. Such a notice would have a salutary effect upon the credit of the government. It gives an earlier control over the debt than would probably be secured by the issue of a straight long-term bond, permitting payment or refunding. The saving in interest thus effected might more than offset the loss from the lower selling price. Moreover, it is not necessarily true that investors always prefer a long-term bond; under certain circumstances they may prefer a short-term bond. In such a case the alleged advantage of the long-term bond over the optional bond would be illusory. The government obligation of long term has generally been preferred in past wars to one bearing the same rate of interest but maturing in a shorter time, because the bonds have usually been issued during a period of impaired credit and consequently at a high rate of interest. After the emergency has passed, with the improvement of the government's credit the bonds have risen above par. In such a case the longer the bond had to run, the greater would be its value. If, on the other hand, the bond is likely to remain below par after the government has ceased borrowing, the short-term obligation would be preferred. This would be especially true if the interest rate on the bonds were lower than the market rate for good securities, as the investor would then prefer to have his capital released for investment in more lucrative undertakings. Such seems to be the case in the United States in the present war.

The fourth kind of bond which presented itself for selection by the Treasury was the straight bond for a definite period such as ten, twenty or thirty years. The advantages of this form of obligation are its simplicity; the possibility of arranging their terms of maturity so as to have them mature, like bankers' paper, at dates convenient for payment or refunding; finally, the higher price obtainable as compared with either of the two former kinds, because of the certainty enjoyed by the creditor that his investment will not be disturbed for a definite period—an advantage which, as has been pointed out, has not been true of the present war, whatever may have been the case in the past. On the other hand, it has the disadvantage that the bonds fall due in one large block, which necessitates refunding. The accumulation of

a fund in advance to provide for their payment, either by a sinking fund or by some other device, is neither advisable nor likely. In the main, therefore, no serious criticism can be urged against the choice by the Treasury of both the optional and the straight bonds, with a preference on the whole for the former category.

The present war has seen the introduction of another credit device in the war saving and thrift stamps. Copied after the English model, they were introduced into the United States in December, 1917, and have since been productive of large returns, amounting by November 2, 1918, to \$532,520,230. The advantages of this form of obligation are several. Their low denomination brings them within the purchasing power of even the lowest income classes. Since they are on sale at all times, they provide a steady, and by no means insignificant, stream of revenue. They also tend to exert a powerful influence upon the habits of thrift and of capital formation on the part of the people. As they have generally been purchased in small sums and for cash, they have been bought out of savings. There has thus been effected a real transfer of services and commodities from civilian consumption to government use. At the same time, the inflation which has followed the flotation of government loans has been avoided. An exception to the general rule seems to have occurred where particular efforts were made to secure thousand-dollar subscriptions to war saving stamps.

(b) *Rate of interest.* The bonds thus far issued in the present war have been emitted at par. As the rate of interest and the term were both stated in the bond, the difficult problem was presented of fixing the rate of interest at a point which would render the obligation an attractive investment and yet secure for the government the needed funds at as cheap a price as possible. Under the circumstances the market rate for a bond of this character must be hit with precision. For the bonds of the first issue the rate of three and a half per cent was fixed, but they were exempt from taxation. Subsequent issues were denied this privilege in part, but as an offset the rate of interest was raised to four and then to four and a quarter per cent.

Several questions suggest themselves at this point. Did the government avail itself of the patriotism of its citizens to secure a rate lower than the ordinary commercial one? About this there seems to be no doubt. The conditions under which loan "drives" have been made in some cases brought a moral pres-

sure to bear upon prospective buyers to purchase, or upon subsequent owners to refrain from selling, which has amounted almost to compulsion. Moreover the bonds of all issues have sold below par on the market. Patriotism might induce large subscriptions to bonds bearing an unduly low rate of interest, but would scarcely be able to support the price when the process of redistributing on the exchange took place.

The "patriotic" loan has been a unique feature of the present war. The amount of bonds to be floated has been so great and the needs of the government have been so urgent that the return on his investment has not always been the deciding factor with the purchaser. At the same time the government has employed the credit machinery and the mechanism of the money market placed at its disposal through the Federal Reserve banks to market its loans at as low a rate of interest as possible. Discount rates and preference rates on loans for the purchase of Liberty bonds have been so shaped as to permit the marketing of bonds at practically any rate the Treasury selected.¹ A low rate of interest having been viewed as one of the most desirable features of the bond issues, every device has been utilized to secure this result.

This raises another question, as to whether the Treasury has, by its own act, sustained the price of the bonds. The third Liberty bond act, of April 4, 1918, provided for a bond-purchase fund and authorized the Secretary of the Treasury, until one year after the termination of the war, to purchase bonds on the market, not to exceed in any one year one-twentieth of the amount issued. As the third Liberty loan amounted to four billions, this provision would permit the purchase of 200 millions of bonds a year. During the six months which elapsed between the third and fourth loans the Secretary of the Treasury made considerable use of this power and bought bonds on the open market. We learn from the annual report of the Secretary that up to November 1, 1918, the Treasury purchased over 244 millions of such bonds, about 172½ millions of the second loan, about 71 millions of the third loan, and \$656,000 of the first loan converted. This action undoubtedly exercised a beneficial effect upon the price of the outstanding issues. The propriety of using the proceeds of the loan for this purpose may, however, be raised at this point. As

¹ See further below, the section of this report on the *Fiscal Aspects of Bank Credit and Currency*, pp. 91-92, 109-110.

a measure of debt redemption it may be justified on the ground that the government, even though it was still in the market at a borrower, was buying its old bonds at a discount while it planned to sell new ones, bearing the same rate of interest, at par. As a method of maintaining, or endeavoring to raise, the market price to an artificially high price it is open to objections. But as a means of preventing a sudden or violent decline, whether accidental or engineered by speculators, an authorization of this sort is probably desirable. The English Exchequer has had the same power conferred on it by Parliament. Obviously it ought to be employed with the greatest possible care; and the large use made of this expedient by the Treasury is in no small measure due to the low rate of interest of the loans.

A loan policy which should utilize the patriotic fervor of a people, stimulated by the contagious enthusiasm of a loan "drive", and then attempt to maintain an artificial price by manipulating the market, in order to sell bonds at an unduly low rate of interest, would be open to severe criticism. Assuming that such a policy were possible, the bad effects would at once become apparent upon the return of peace when government support would be withdrawn as no longer necessary. The price of the bonds might then fall to normal levels and an undeserved loss be inflicted upon such holders as might be compelled to sell them before maturity. After the Civil War the use of the national bonds as a basis for bank-note circulation long gave them an artificial value, but that support will probably be lacking for the Liberty bonds after the present war and the price will be a normal one. Such a procedure, if pursued by a government, would undoubtedly affect its credit when it next appeared as borrower upon the money market.

The effect of offering unduly low rates of interest upon saving and capital formation should also be considered. It is doubtful whether even very high rates of interest would induce sufficient saving to create a fund adequate for meeting war expenditures. It is certain that the offer of low rates of interest, even with the added appeal to patriotism, would not suffice to attract savings of sufficient volume to finance the war. The conclusion is inevitable that the diversion of income from ordinary uses to government needs calls for the general and heavy taxation of consumption goods. Compulsory saving must supplement the economic appeal to thrift and industry.

Conclusions drawn from the analogies of previous wars, however, must be used with caution in this connection, for the ordinary principles of supply and demand have not been permitted to work themselves out in the present war. The control of production and of industry, price control and other methods have affected a compulsory diversion of capital from ordinary uses to government service which has modified the operation of normal economic forces.

(c) *Term.* Allusion has already been made to the use of optional or double-term bonds. Three out of the four Liberty loans were of this description. The dates of issue and maturity are shown in the following table:

No.	Date of Issue	Amount Accepted	Interest	Redeemable	Payable
1.	June 15, 1917	\$2,000,000,000	3-½%	1932	1947
2.	Nov. 15, 1917	\$3,808,766,150	4 %	1927	1942
3.	May 9, 1918	\$4,176,576,850	4-¼%		1928
4.	Oct. 24, 1918	\$6,989,047,000	4-¼%	1933	1938

The shortening of the term from a 15-30 year bond for the first loan to a 10-25 year bond for the second was in accordance with a policy of beginning with a long-term obligation and of shortening the period of non-payment at each successive issue. By the time the third loan was to be floated, however, the optional bond was discarded in favor of a straight ten-year obligation. The fourth loan saw a reversal both in the form of the bond—the optional one again being selected—and also in the length of the term—the period of non-payment being lengthened from ten years to fifteen. These changes reflect the varying conditions of the market, and were made upon distinct representations by the bankers through whom the greater part of the work of floating the issues would have to be done.

As the dates now stand, the present debt is not well arranged for a policy of energetic debt payment to be undertaken immediately after the war. Of the seventeen billions of bonds, about eight billions in round numbers will become redeemable in 1927-1928, and the remaining nine billions in 1932-1933. The final date at which the bond of longest date falls due is 1947. But of this total amount of debt over seven billions have been advanced to the Allies. Assuming that this will be liquidated by them, the net debt to be paid by the United States was in November 1918 about ten billions. This will probably increase to over fifteen

billions before the end of the fiscal year. If the American people will submit to the continuance of taxation for debt purposes in the amount of about one and a half billion dollars a year this enormous sum could be expunged by 1947 when the last bonds fall due. This would be an achievement unparalleled in the financial annals of the world.

The question still remains as to the wisdom of establishing the minimum period of non-payment for as long a period as ten years. The best time to begin the payment of a debt is immediately after the conclusion of peace, when the revenues from taxation are large and industry is adjusted to the war taxes, and when expenditures for war have stopped. In the case of the Liberty loans ten years must elapse before the first one now outstanding becomes redeemable. The Treasury has indeed announced that a fifth loan will be floated in the spring and that this will consist of short-term bonds running for three, five and eight years. If this is done the unduly long period of non-payment in the present bonds will be corrected and the debt will be brought under the earlier control of the Treasury, thus permitting redemption to begin at a reasonably early period.

The purpose in arranging different terms for successive issues of bonds is to have them fall due at different times convenient for payment or refunding. If the original plan of the Treasury had been consistently pursued, the last bonds issued would have been for a short term and have lent themselves more perfectly to a policy of speedy repayment. But the success of such a policy depends of course upon the length of the war and the number of loans issues, as well as upon other factors.

In any case the Treasury may purchase its own debt in the open market and then cancel it. This method applied to the Civil War debt resulted in driving the price of the bonds up to unprecedented heights. During the single year 1888 it cost 112 millions to buy 94 millions of bonds not yet due. It is doubtful, however, whether a similar action at the present time would have the same results, at least under the existing income and excess-profits taxes. It may therefore be assumed that in spite of the fact that the earliest date at which any of the present debt comes under the control of the Treasury is ten years, the actual process of debt payment will begin immediately after the Treasury withdraws from the market as a borrower. It is earnestly to be hoped that the policy of debt payment may be speedily initiated and vigorously prosecuted.

4. *Exemption from taxation.* The strongest argument in favor of exempting federal bonds from taxation is that they will sell at a higher sum and thus yield a greater return to the government. Why should the government tax its own securities, it is asked? In either case, so the argument runs, the aggregate sum will be the same. Although this may be true under normal conditions with proportional taxes, when the rate of taxation remains unchanged, not only is this argument without force under the conditions which have obtained in the present war, but the practice has resulted in injustice. Since a large part of the war revenues have been, and are being, obtained from highly progressive income taxes, the possession of tax-exempt bonds, bought before the rates were raised, has afforded an unfair advantage to the large income-tax-payer. Moreover, since the loan has been taken by recipients of small incomes as well as by those of large incomes the price has not been enhanced by the full amount of the exemptions granted and consequently the gain to the government from the lower interest rate will not be as great as the loss in revenues from the income tax. In the case of the first Liberty loan the bonds unfortunately run for 15-30 years, the longest of any of the issues. The original injustice will thus be perpetuated for an unduly long time. Happily, this discrimination has been largely, though not entirely, corrected in subsequent bond issues.

The purpose of the exemption was to make the bonds more attractive and thus to permit their floating at a lower rate of interest than would otherwise have been possible. If at any time they should fall below par, so it was argued, it would be possible by raising the rate of the normal income tax to bring up their value again. Such a method, however, was both uncertain and expensive. It was expensive because the demand for tax-exempt bonds is confined to those who would profit by this arrangement, and the amount to be floated successfully would depend upon the number of such persons. If the bonds are to be made attractive to the non-income-taxpayers, they must bear a higher interest rate than the other group would be willing to accept. Hence the saving in interest would not be as great as the remission in taxation. It is also an uncertain and clumsy procedure, for the Treasury cannot affect the marketability of the bonds as readily by the indirect method of changes in the rate of the income tax as it can by direct changes in the rate of interest. Moreover,

the policy of tax exemption, never entirely abandoned, has introduced a certain element of discrimination as between the different bond issues.

The same arguments may be adduced against the exemption from taxation of the income from state and municipal bonds. If these are exempt while federal bonds are taxed, a discrimination against the latter is introduced which makes it more difficult to sell them in competition with the former. In the present war, this difficulty was met by denying to local governments complete freedom in the use of their credit. By exempting state and municipal bonds, moreover, a particular class of capitalists is favored above all others. How valuable this privilege is, may be judged from the high market prices paid for bonds of these descriptions. But not merely is discrimination between classes in the community introduced. The exemption from taxation has raised the price of state and municipal bonds and has distinctly improved their credit. There is danger that after the war they may be lured, by the low rates at which they can borrow, into extravagant or unnecessary enterprises. In a period when economy in expenditures is particularly important, this is a dangerous possibility.

It has also been argued that for a government to tax the interest of its own promises to pay, after those obligations had been sold without the imposition of such a tax, is morally an impairment of the terms of the contract. In answer, it may be said that such a claim for exemption from all future taxation rests upon a misconception of the nature of the state, unless such exemption is specifically granted by the very act which provides for the issue of the bonds.

It has been accepted without argument that the decision of the Supreme Court in the case of *Pollock v. The Farmers' Loan & Trust Company*, in the income-tax decisions of 1895, still holds good. But in the meantime the constitution has been amended by the passage of the sixteenth amendment which grants Congress power "to lay and collect taxes on income from whatever source derived". No requirement for the exemption of income from state and local bonds is to be found in this amendment. Moreover, entirely apart from the power granted by the sixteenth amendment, it has been argued that the federal government has power to tax the net income from practically every source as part of a general income tax. On the other hand it is held by constitutional lawyers of high standing that the position

originally taken by the Supreme Court would hold to-day, even in the face of the latest amendment to the constitution. Where there is such diversity of opinion it is highly desirable from every point of view that the question of their exemption be again raised and that the Supreme Court be asked to pass upon it.

5. *Distribution of the bonds.* The Treasury's policy in its issue of the war loans has been threefold—to raise the requisite money, to place the bonds permanently, so far as might be practicable, and to avoid as far as possible placing them with the banks, the investment of whose funds in government securities would interfere with the free movement of credit. The question as to the influence of subscriptions made through money borrowed by subscribers at a bank stands on a somewhat different footing, in so far as the Treasury's policy has been to encourage, rather than discourage such action. Our general impression is that most of such borrowings have been of a temporary character—say three to nine months—and designed merely to anticipate income accruing during that period. But the practice nevertheless seems one to be deprecated.

The first purpose, that of raising the necessary funds, our government has more than achieved, as is shown by the over-subscription of every one of the four Liberty loans.¹ The second purpose, that of getting the bonds lodged permanently in the hands of the original subscribers, has been only partially successful, because the market price has invariably declined after the issue; that decline having extended at times to three or five per cent. This was proof that some subscribers either desired to realize on their bonds, or were compelled to do so. On the other hand, the depreciation has been comparatively small except at times when the war news was so unfavorable as to indicate a long continuance of the struggle. This would suggest that the need of subscribers to turn their bonds into cash was not urgent. As for the third purpose, that of avoiding direct subscriptions by the banks, information from the Treasury and other sources indicates that the banks were comparatively light subscribers on their own account to the

¹ This is shown in the following table:

No.	Amount asked for	Subscriptions	No. of subscribers
1.	\$2,000,000,000	\$3,035,226,850	4,000,000
2.	\$3,000,000,000	\$4,617,532,300	9,420,000
3.	\$3,000,000,000	\$4,176,516,830	17,000,000
4.	\$6,000,000,000	\$6,989,047,000	21,000,000

first loan, that they subscribed in much more considerable proportion to the second and third loans, but that in the fourth loan notwithstanding the very much greater total they were a less important contributor than in the preceding loan.

It is difficult to discriminate between rediscounts by the Federal Reserve for other banks, on collateral consisting of Liberty bonds, and rediscounts on collateral consisting of short-term certificates of indebtedness. The Federal Reserve statements are therefore no fair indication of the bank holdings of the war loans. On October 25th, however, the Federal Reserve Board reported holdings by member banks of United States bonds, including Liberty bonds and not including certificates of indebtedness, at \$1,018,439,000, as against \$592,695,000 on May 24th when the previous loan had just been placed. In other words, there had been a substantial increase of such holdings. Since approximately ten billions Liberty bonds were actually outstanding at the October date, the banks apparently held slightly over one-tenth. The statement referred to, however, did not cover all banks, but only those which were members of the Federal Reserve. There is no doubt, nevertheless, that recourse to the banks on even this scale, however necessary, has been a weakness in the government's war financing, especially if we add to the above figures the large amount of loans collateraled by the bonds and the certificates of indebtedness.

It is impossible to say how many of the outstanding war bonds are held permanently. The banks will naturally dispose of their own holdings at the earliest opportunity. Savings banks and life-insurance companies would to a large extent do the same, provided the price of such bonds were to rise to a point where the invested principal should be recoverable. At the present time they could reinvest their funds at a much higher interest rate in perfectly sound investment securities outside of government bonds. The same argument may apply in the case of individuals, and its resultant effect would naturally be to restrain recovery in price for the war bonds.

This failure of an advance in response to returning peace is usually the immediate sequel to every great war; whence the familiar phenomenon of a decline or stationary price for war loans during several years after such a war is over. Our own Civil War ended in 1865, but it was not until 1870 that United States bonds crossed the high price of 1864. It was two years

after the battle of Waterloo in 1815 before British consols recovered their price of 1814.

The working-out of this process always depends first on the actual yield of the war bonds themselves—that is to say, how far that yield is in line with actual market value of capital—and second on the subsequent rise or fall in the market price for other high-grade securities at the time when government bonds were not moving with them.

In some respects the most important task ahead of the Treasury is to accustom the American people as a whole to individual investment in government bonds. Until this war they had for nearly half a century been unaccustomed to such investment, for the reason that the “circulation privilege” then in vogue, which was regulated by holdings of United States bonds by the note-issuing banks, caused the banks to bid such prices for United States bonds, old or new, as made them all but non-remunerative as income-producers to the ordinary investor. To what extent further issues of United States bonds will make this appeal to the average investor at the present rate of interest paid upon them, is a question which the markets themselves will have to test.

FISCAL ASPECTS OF BANK CREDIT AND CURRENCY

The banking and currency system of the United States had, from the beginning of the European war, an important relationship to fiscal conditions. It was largely by reason of the fact that our banking system had been reorganized and placed upon a stable basis that we were able, during the early days of the war, to provide for financing the process of reorganizing industry when necessary to meet the requirements of foreign buyers. When the United States itself became a belligerent it was plain from the outset that our newly organized banking system would be called upon to adopt a policy which would be effective in enabling the Treasury department to finance the war.

The form in which the first demands upon the banking system were made evident was an issue of short-term certificates which were placed with the Federal Reserve banks. Not long after this preliminary advance had been made Congress adopted the first Liberty Loan Act which incidentally authorized the Secretary of the Treasury to sell short-term certificates of indebtedness running not to exceed ninety days. The Secretary of the Treasury had already designated the Federal Reserve banks as fiscal agents of the government and under their general leadership an organization designed for the purpose of selling Liberty bonds to investors was in process of development. The sale of Liberty bonds, however, necessarily proved to be slow, and in the meantime the very heavy demands of the government made in connection with its war preparations, and with the financing of the foreign governments allied with it, had to be met.

One method determined upon for meeting such requirements was that of placing with the banks of the country short-term certificates of indebtedness which were subsequently to be funded into Liberty bonds. The banks were expected to purchase, to pay for and if necessary to hold these certificates up to the time when definite subscriptions by investors became available. The certificates were then paid off and the bonds took their places, the

banks being thus relieved of the advances which they had made and reimbursed out of the proceeds of the bond sales. As the war advanced, it became necessary to obtain funds with almost absolute certainty and regularity, and in consequence the plan was developed of calling upon the banks for the use of a certain percentage of their current assets in taking up the certificates. Still later, this percentage was increased, while the certificate sales became more numerous, eventually reaching a semi-monthly basis. Inasmuch as the proceeds of a Liberty loan were usually but little more than sufficient to pay off the previously issued certificates, the sales of certificates became practically a continuous process, so that the banks were constantly called upon to carry a continuing load of short-term Treasury obligations.

In effect, this method of finance required the investment of a certain proportion of bank resources in government obligations. Such obligations were paid for by marking up on the books of the banks a corresponding amount in deposit credits without reserve requirement, these deposits being subsequently transferred as the requirements of the government demanded. Eventually the banks which were called upon to pay these deposits received in most cases an equivalent amount of other deposits from their regular customers so that the net effect was an addition of deposit credit on the books of the banks of the country, notwithstanding that such credit did not necessarily represent a corresponding amount of liquid wealth.

From the very first the rate of interest to be fixed upon the short-term certificates was of fundamental importance, and the significance of this rate became more and more evident as time went on. Almost from the beginning it was plain that the Federal Reserve banks would be called upon to carry the load of public financing at critical moments, because of the fact that the banks could not in most cases subscribe as promptly as the Treasury desired them to do, unless the Reserve banks stood ready to relieve them by discounting their paper. In this connection, too, it was thought desirable that the rate to be charged by Federal Reserve banks must not exceed the rate fixed by the Treasury department upon certificates of indebtedness. Had the rate been higher the result would have been to impose upon the banks, which offered for rediscount customers' paper secured by certificates, a penalty equal to the difference between the rates paid by the Treasury and those of the Reserve banks. The first

development of a discount policy on the part of the Reserve authorities was therefore that of permitting the direct rediscount of obligations secured by government bonds or certificates or indebtedness at the coupon rate. This policy was greatly broadened by admitting to Reserve banks the obligations of non-member banks which were given practically the same status as those of members. As more Liberty loans were offered upon the market the Treasury gradually raised the coupon rate, but never raised it to a point corresponding to the market rate as was suggested by the fact that each of the issues of bonds fell considerably below par as soon as it became subject to dealings in the open market. The certificates of indebtedness, being composed of short maturities and being held chiefly by the banks, did not suffer a corresponding depreciation, but they bore a fixed relationship in their rate to that which was established for the long-term bonds.

To sum up this process of financing, therefore, we may say that it amounted to placing in the hands of the banks a great volume of public obligations which they held and carried continuously, such obligations bearing a rate materially below the market rate. We may say, however, that in consequence of this situation and of the close reliance of the banks upon the Reserve banks (because of the concentration of reserves in the hands of the latter), it was never possible for the Reserve banks to raise their rates of rediscount above the coupon rates of the certificates and Liberty bonds. This was a condition of affairs in which only absolute co-operation on the part of the public in taking out of the hands of the banks the entire output of certificates and bonds could have availed to prevent undue expansion of bank credits.

This summary of the case, it appears to the committee, is sufficient to show the existence of an important connection between currency and credit conditions and the government's fiscal operations, as well as the effect of the government's operations on those conditions. But these currency and credit conditions necessarily had a wider scope of influence, affecting the finances of the government not only directly, but also indirectly through their influence upon the financial and industrial position of the country at large. As to this broader question the committee presents the following facts, on the interpretation of which the general conclusions as to cause and effect in the field of banking, indus-

trial markets, and prices of commodities will necessarily depend.

The manifestation of the effects of war-time financing, aside from the taxation, which makes itself most evident to the public, is twofold: (1) changes in the volume of the currency and banking credit of the country and (2) changes in the price level. It is therefore necessary first of all to ascertain what changes in these particulars have taken place.

*Physical Volume of Business 1913-1917*¹

In this connection the first problem is to measure in some way the growth of trade needs since 1913. This cannot be done with any high degree of accuracy, but a rough approximation can be reached through the study of certain statistics which typify business activity and growth. Obviously the statistics used for this purpose should be statistics of physical quantities and not of values involving prices.

The items chosen should be important ones which are reasonable indices of either business activity and growth in general, or of business activity and growth in important branches of industry. Among the best items for measuring the movement of business in general, because they are items that enter into so many products, are the production of pig iron, bituminous coal, anthracite coal, petroleum, copper and silver. Other good indices of general business are the number of tons of freight carried on important railroads and the tonnage of vessels entered and cleared at American ports. Representative of the building industry is the number of building permits given in leading cities. Here are twelve items any one of which is an honest witness of the growth of American business, but each of which has its own bias. Safer than to trust any one of them is to take the testimony of all, so that in the mouths of many witnesses the truth may be established. If we reduce the figures for each of these twelve

¹ In preparing the following pages which deal with changes in banking credit, currency and prices, growing out of the war, use has been made of an article written by Professor E. W. Kemmerer and published in the *American Economic Review* for June, 1918. The statistical work follows substantially the lines laid down in the paper referred to, the figures, however, being brought up to date, condensed, and in some cases altered. There are differences of opinion with reference to the validity of certain of the statistics used, and the committee recognizes that the banking changes of the past few years render the figures in some particulars non-comparable. Nevertheless, the general results indicating banking credit and currency conditions are so obvious in their nature that it is believed there can be little doubt concerning the general character of the conclusions.

items to a percentage basis, taking as 100 the figure for the calendar year 1913, and if we then combine these percentage figures into a simple average we arrive at a series of index numbers, which should represent in a rough way the growth of business in general. Such computations give the result shown in the following table:

GROWTH OF BUSINESS 1913-1917 ¹

1913	100
1914	99
1915	103
1916	107
1917	112

Aside from the slight decline in the year 1914 when the war broke out, the figures show a moderate growth of business each year from 1913 to 1917. Comparing the year 1913 with 1917, we find a business growth of twelve per cent.

Money in Circulation

Our next inquiry concerns itself with the volume of money in circulation each year throughout this period.

The term "money in circulation" is one subject to several different interpretations, but here it will be used to cover all the money in the country, except that held in the federal treasury, and that held by federal reserve banks and federal reserve agents as reserve against outstanding federal reserve notes.² In order

¹ In computing the items in the table given above, the figure used for anthracite coal is that representing the number of tons carried to tide water. The figure for copper refers to refined output, including import of crude copper. The figures for building permits granted in certain cities cover 49 leading cities. They are the figures given in the *Statistical Abstract of the United States* for 1916, less the figures for Fall River, Providence, and Reading, cities for which data are not available for all years. Figures for 1917 were compiled from *Bradstreet's Review*. The index number covering the number of revenue tons of freight carried on railroads is based upon six representative railroads, the only ones for which figures for the period 1913-1917 were available for calendar years. The railroads included are: Cleveland, Cincinnati, Chicago & St. Louis Railroad; Delaware and Hudson Co.; Delaware, Lackawanna & Western Railroad; New York, Chicago and St. Louis Railroad; Pennsylvania Railroad; and Pittsburgh, Cincinnati, Chicago and St. Louis Railroad.

² Only net circulation of Federal Reserve notes is included in the circulation, but the net circulation is computed on the basis of allocating to the notes the same percentage of reserve as that represented by the percentage of cash reserve held by the Federal Reserve banks to deposits and outstanding notes combined. In this way the figures for the period before the federal reserve amendment of June 21, 1917, are made comparable with those after that date.

to make the figures representative of the entire year, and to render them comparable with those for the growth of business, we have taken for each year the average of the circulation figures for the four quarterly dates, March 31, June 30, September 30, and December 31.

MONETARY CIRCULATION OF THE UNITED STATES

<i>Year</i>	<i>Amount of money in circulation (Millions)</i>	<i>Index Number</i>
1913	\$3,390	100
1914	3,505	103
1915	3,682	109
1916	4,159	123
1917	4,914	145
1918 ¹	5,428	160

This shows an increase in the total circulation over 1913 of forty-five per cent for 1917, and sixty per cent for the first three-quarters of 1918. The increase, it will be noted, is much larger than that of the physical volume of business, which was only twelve per cent for the period 1913 to 1917.

The country's total stock of money (average of four quarterly dates) rose from 3,732 millions in 1913 to 5,661 millions in 1917, an increase of 52 per cent, and to 6,848 millions in 1918 (three quarterly dates), an increase of 83 per cent over 1913; while the stock of monetary gold rose from 1,885 millions in 1913, representing 51 per cent of the total stock of money, to 3,064 millions in 1917, representing 54 per cent of the total stock; and to 3,066 millions in 1918, representing 45 per cent of the total stock.

It appears, therefore, that while there has been a great increase in the amount of monetary gold in the country since 1913, that increase has not been commensurate with the increase in the country's stock of money, or of its monetary circulation.

Deposit Currency

The great bulk of the business of the United States—variously estimated from 75 to 90 per cent—is effected not directly by means of cash, but by means of bank deposits which circulate through the instrumentality of bank checks. An examination of the growth of deposit currency is therefore a most important part

¹ Figures represent the average for three quarterly dates.

of any study of the extent of price variations. Before considering that growth, however, it will be helpful to consider briefly and somewhat parenthetically the growth of bank reserves during the same period.

Check deposits are all payable in cash on demand and, although they are supported by the other assets of the banks, their most direct and immediate support is the cash reserve. Deposits must be paid in cash when cash is demanded, and the other assets may be used for that purpose only when turned into cash. In its function of serving as bank reserves, money possesses its most efficient use. Approximately half of the entire monetary circulation of the country is held in bank reserves for the support of bank deposits.

Recent improvements in our banking system, growing out of the establishment of the Federal Reserve system and its subsequent development, have made our reserve money, as will be seen below, more efficient than it formerly was; in other words, have enabled a dollar in reserve to do more money work than before. This in effect is equivalent to increasing the supply of reserve money.

In the light of this fact let us examine the evidence available on the subject of the growth of cash reserves, and the bank deposits from 1913 to 1918. In the examination of cash reserves held against deposits, we shall concern ourselves not with legal reserves, but only with ultimate cash reserves; namely, cash on hand in individual commercial banks and in Federal Reserve banks—cash reserved as the currency support for individual and government deposits.

The reserve figures used in this report cover the following items: (1) the average amount of cash in vaults of national banks for the dates of the five or six comptroller's calls each year, said cash being taken to include specie, legal tenders, fractional money, and bank notes of other banks;¹ (2) the cash in vaults of state banks and loan and trust companies about July 1 of each year, as shown by the reports of the Comptroller of the Currency; (3) such a part of the cash reserve of the twelve federal reserve banks

¹ The five per cent redemption fund deposited with the Treasurer of the United States, for the redemption of bank notes, although countable as part of a bank's legal reserve money against deposits prior to the inauguration of the federal reserve system, was in fact so essentially a redemption fund for bank notes that it has not been included in the cash reserve against deposits given below.

as is properly allocated to deposits as contrasted with federal reserve notes.

Computed on the above basis, the cash reserves against deposits of all commercial banks and of the twelve Federal Reserve banks increased from 1,488 millions in 1913 to 2,254 in 1917, an increase of fifty-one per cent. Comparable figures for 1918 are not yet available. If we examine the proportion of the total money in circulation represented by cash in banks held as reserves against deposits (exclusive of reserves held against federal reserve notes), for the same period, we find that "the ratio of cash reserves against deposits in banks to total monetary circulation" increased from forty-four per cent in 1913 to forty-six per cent in 1917. The conclusion, therefore, is that a slightly larger percentage of the money in circulation in the United States was in bank reserves (against deposits) in 1917 than in 1913.¹

Let us now return from this parenthetical discussion concerning reserves to an examination of the growth of the deposit currency for which these reserves provide the cash support. What has been the growth of bank deposits during the period 1913-1918? In such an inquiry we are concerned only with demand deposits subject to check. We may therefore eliminate the deposits of savings banks and of private banks, although a few of these deposits come under that class.² Deposits of one bank in

¹ The basis of the apportionment is the assignment to deposits of that proportion of the total cash of the reserve banks (including that deposited as collateral with the federal reserve agents for federal reserve notes) which is represented by the ratio of the total deposit liability of the banks to the total deposit and federal reserve note liability. The figures for each year used in computing the federal reserve banks' reserve against deposits are the average figures for the four quarterly dates coming near the end of the four quarters beginning with the date of March 31 each year.

² Time deposits of commercial banks should properly be eliminated, but inasmuch as these are not separated from the demand deposits in the official figures covering the period prior to 1915, it is impracticable to separate them in our figures. Furthermore, the same legal reserve was required to be held against them by national banks prior to the inauguration of the federal reserve system as was required against demand deposits, and the reserve included in the figures previously given in this paper for commercial banks included reserves held against time deposits. Inasmuch as time deposits in commercial banks are relatively small as compared with demand deposits, and show during the few years for which we have separate figures a roughly constant ratio to demand deposits, their inclusion in the deposit figures for the entire period will not materially affect the result.

another bank may likewise be eliminated. Since these deposits are chiefly for reserve or collection purposes they may best be considered as part of the machinery of banking. Government deposits in either commercial banks or federal reserve banks should be included among the deposits representing the deposit currency of the country regardless of the fact that the law does not require a legal reserve to be held against most United States government deposits in commercial banks. Government deposits are usually payable on demand and are subject to check. Inasmuch as other annual figures have been based upon the average figures for quarterly periods, or for the dates of the comptroller's calls each year, the same policy will be followed in computing deposits. For deposits of state banks and trust companies, figures must be taken for a date about July 1, since that date in the middle of the year is the only one for which comprehensive figures are available. Constructing the figures for deposits in the manner just explained, we obtain the following figures for the growth of deposits during the period 1913-1918.

GROWTH OF BANK DEPOSITS, 1913-1918

<i>Year</i>	<i>Total Deposits</i>	
	<i>Amount (Millions)</i>	<i>Index Numbers</i>
1913	12,678	100
1914	13,430	106
1915	14,411	114
1916	17,840	141
1917	21,273	168
1918 ¹	(24,600)	(194)

These figures show a pronounced growth in bank deposits since 1913. The growth is roughly the same for national banks, and for state banks and trust companies combined. For the period 1913-1917, the increase was 68 per cent for the combined deposits of national banks, state banks, trust companies, and the government deposits of federal reserve banks. For the period 1913 to June 30, 1918, the rate of increase for national banks was 87 per

¹ Figures for 1918 represent an average for the dates of the three comptroller's calls, namely, March 4, May 10, and June 29.

Figures for state banks and trust companies for 1918 are estimated, on assumption that the rate of increase for state banks and trust companies in 1918 over 1917 stood in the same ratio to the rate of increase for national banks as it did in 1917 over 1916.

cent and the estimated rate of increase for the combined deposits was 94 per cent.

Total cash reserves of banks, it will be recalled, increased 51 per cent between 1913 and 1917. Bank deposits having grown therefore much more rapidly than bank reserves, it follows that each dollar of reserve money is now supporting a larger superstructure of bank deposits than before. This fact will appear from the following table, based upon the figures previously given.

PERCENTAGE OF CASH RESERVE TO COMBINED DEPOSITS

<i>Year</i>	<i>Percentage</i>
1913	11.7
1914	11.7
1915	11.9
1916	10.7
1917	10.6

The average percentage of cash reserve to deposits was therefore about one point lower than it was the year before the war. Measured percentage-wise the decline from 1913 to 1917 was 9.4.

The index number for the growth of the physical volume of business showed for the period 1913 to 1917 an increase of twelve per cent. Satisfactory data for 1918 are not yet available. From 1913 to 1917, the amount of money in circulation increased 45 per cent, and from 1913 to 1918 it increased 60 per cent. The country's total stock of money from 1913 to 1917 increased 52 per cent, and from 1913 to 1918, 83 per cent. The proportion of the total stock represented by gold was 51 per cent in 1913, 59 per cent in 1917 and 45 per cent in 1918. Although the proportion of the country's total money supply (exclusive of that held in federal treasury vaults and of that held as reserve) declined slightly from 1913 to 1917, namely from 56 to 54 per cent, the absolute amount outside of banks increased 40 per cent.

At this particular time, moreover, there are reasons to believe that the dollar in active circulation was becoming more efficient. This was the period of the revision of the Federal banking system, and the inauguration of the Federal Reserve system. Certain features of that revision have enabled the average dollar in active circulation to do more money work than formerly. For example, the creation of the gold settlement fund has made possible transfers of many millions of dollars by means of book credits that would otherwise have required the shipment of cur-

rency from one Federal Reserve district of the country to another, and has therefore reduced the average amount of money tied up in transit. The establishment of twelve Federal Reserve banks, each with the privilege of note issue, and the establishment of a number of Federal Reserve branch banks have brought sources of new currency supply nearer at hand in many sections of the country than ever before, and this has also reduced the necessity of currency shipments and has lessened the average distance of such shipments as are made. This result has been further promoted by the creation of the Federal Reserve clearing and collection system. There is little reason to doubt, therefore, that the average dollar in active circulation in the United States does its work more efficiently to-day than it did before the war.

More important than the money in active hand-to-hand circulation is that in banks which serves as the cash basis of our vast deposit or check currency. Upon that subject our figures show that a slightly larger proportion of the total money of the country (outside of the federal treasury and exclusive of reserves held against Federal Reserve notes) is held in bank reserves against deposits now than in 1913, the proportion having increased from 44 per cent to 46 per cent. They show further that the amount of money held in bank reserves against deposits has increased enormously since 1913, the increase for 1917 over 1913 being 51 per cent as contrasted with 12 per cent for the physical volume of the country's business. Not only has the amount of reserve money greatly increased since 1913 but each dollar in reserve is carrying a greater burden of deposits than it was prior to the war. In 1913 the average cash reserve to deposits for the entire country was 11.7 per cent, and in 1917 it was 10.6 per cent. In other words, in 1913, 11.7 cents provided the cash support for a dollar of deposits, while in 1917 10.6 cents supported the same load. The last item alone represents an increased efficiency of the dollar acting as reserve money, of 9.4 per cent.

Combined demand deposits of national banks, state banks and trust companies, and government deposits in Federal Reserve banks, increased from 12,678 millions in 1913 to 21,273 millions in 1917, an increase of 68 per cent, and to 24,600 millions (estimated 6 months) in 1918, an increase of 94 per cent. It is probable that the efficiency of bank deposits themselves circulating through the instrumentality of checks has also increased since 1913 under the "speeding up" pressure of war

needs, and that the rate of deposit turnover has also increased, but on that point satisfactory data are not yet available.

The evidence therefore shows that a slightly larger proportion of the money of the country was in bank reserve in 1917 than in 1913, that the amount of cash in reserve increased much more rapidly than the business of the country during that period, and that demand deposits increased much more rapidly than did reserves, so that each dollar in reserve provided the cash basis for a large amount of deposits in 1917 than in 1913. Furthermore, it appears probable that the average bank deposit has a higher rate of turnover in 1918 than in 1913, or, in other words, that a larger amount of check business is being done in 1918 than was done in 1913 for each dollar of average daily deposit.

The great reduction in legal reserve requirements brought about by the Federal Reserve Act was largely rendered possible by the fact that the country's commercial paper was made more liquid by that act, both through the rediscount privilege provided by the federal reserve banks, and through the development of an open competitive market for commercial paper. Banks no longer need to maintain large cash reserves, which are often comparatively idle, in order to be able to carry the peaks of the load. They have a ready recourse for funds at the Federal Reserve banks in time of need. The Federal Reserve banks in turn have the power to meet sudden calls for funds through the issuance of federal reserve notes, or through the reduction, under emergency conditions, of their cash reserve below the normal legal minimum.

During the war we were large exporters of supplies to belligerent countries, and, on net balance, despite our large purchases of American securities from abroad, we have had large sums due us. Hence the tremendous net importations of gold that this country has witnessed in recent years—importations which together with our home production have increased our stock of monetary gold from about 1,885 millions in 1913 to 3,046 millions in 1917, and 3,066 millions in 1918. Our gold embargo¹

¹ The embargo was laid by a proclamation of President Wilson dated September 7, 1917. Under its provisions the exportation of coin, bullion, or currency from the United States was prohibited, except when specifically licensed by the Federal Reserve Board with the approval of the Secretary of the Treasury. Since that date gold exports from the United States have been very small, and the privilege of exportation has been jealously guarded. See *Federal Reserve Bulletin*, Oct. 1, 1917, pp. 736-739.

has for some time prevented this gold from leaving the country in any considerable quantities and from going to those countries with which our exchange rates are unfavorable. To demand gold from the banks or the treasury, or to use it in circulation, was during the war generally looked upon as an unpatriotic act. Every effort was made in the United States, as in other belligerent countries, to impound the gold as far as possible in the vaults of the central banks where, to meet war emergencies, it might serve as a basis for the maximum amount of credit—bank notes and deposits. There is little incentive for a corporation or an individual to have gold coin in his possession. He cannot export it, and to spend it or to have it in his pocket or till is to brand himself as unpatriotic. Meanwhile all kinds of money, and deposits in solvent banks were, with some qualifications, at par with gold; but gold, and with it all other kinds of money, has been rapidly losing its purchasing power over commodities.

Prices

Let us now examine briefly the evidence with regard to price movements. There exist in the United States a number of index numbers of prices, which are familiar to the readers of this report. All of these price index numbers tell essentially the same story. The most comprehensive of them, in the field of prices covered, embracing as it does prices for about 292 commodities, and the one that is constructed upon the most scientific lines, is that of the federal Bureau of Labor Statistics, and we shall therefore confine ourselves to the evidence afforded by this index number. Inasmuch as our previous figures have been constructed as far as possible on the basis of average conditions throughout the year, instead of for conditions on any one date each year, we shall use here average monthly price figures, except where otherwise designated. The movement of wholesale prices according to the figures of the Bureau of Labor Statistics has been as follows since 1913.

INDEX NUMBERS OF WHOLESALE PRICES

1913	100
1914	99
1915	100
1916	123
1917	175
1918 (8 months)	192

This shows an increase of 75 per cent from 1913 to 1917, and of 92 per cent to 1918. An analysis of the figures shows that a substantial rise in prices took place in all kinds of commodities. Taking the nine groups of commodities into which the Bureau of Labor Statistics classifies the 292 commodities ordinarily covered by its index number, we find that for the respective groups of commodities the average index number increased from 1913 to 1917 and to 1918 (6 months), respectively, in the following percentage; farm products 88 per cent to 1917 and 111 per cent to 1918; food, etc., 77 per cent to 1917 and 82 per cent to 1918; cloth and clothing 81 per cent to 1917 and 125 per cent to 1918; fuel and lighting 69 per cent to 1917 and 71 per cent to 1918; metals and metal products 108 per cent to 1917 and 75 per cent to 1918; lumber and building materials 24 per cent to 1917 and 42 per cent to 1918; drugs and chemicals 85 per cent to 1917 and 113 per cent to 1918; house-furnishing goods 55 per cent to 1917 and 89 per cent to 1918; and miscellaneous goods 53 per cent to 1917 and 68 per cent to 1918.

Viewing the situation from another angle, and comparing individual prices for March, 1918, with those for July, 1914, we find that of the thirteen items of animal products covered by the figures of the Bureau of Labor Statistics every one increased decidedly in price during that period, the increase varying from thirty per cent to 182 per cent. For vegetable products, eleven in number, the price rose decidedly for all but one, namely, potatoes, where there was a decline of 43 per cent for the dates mentioned. Of the other ten items, the smallest increase registered was 57 per cent, and the largest 364 per cent. Of the thirteen items classified under textiles and leather goods, every one increased decidedly in price, the smallest increase for any item being 36 per cent and the largest 228 per cent. For the fourteen items of mineral products, every one likewise increased decidedly in price, the smallest increase being 33 per cent, and the largest one being 200 per cent.¹

Coming to retail prices we find that the index number for the retail prices of food in the United States prepared by the Bureau of Labor Statistics shows an average increase from August 15, 1913 to August 15, 1918 of 70 per cent. A recent investigation

¹ For details of these figures see *Monthly Review of the Bureau of Labor Statistics*, June, 1918, p. 91.

made by the National Industrial Conference Board ¹ shows that the retail prices of clothing of the types purchased by laboring men rose on the average from July, 1914 to June, 1918, 77 per cent; ² that the average price for fuel and light rose 45 per cent; ³ and that average house rents of workingmen's houses rose 15 per cent.⁴

There is ample proof, therefore, of a very great rise in prices since 1913, and of the fact that this rise has affected all classes of commodities, although it has naturally affected different classes of commodities and different commodities within each class differently, because each commodity has its own peculiar conditions of production and demand, and because the government has followed a price-fixing policy with regard to some commodities. The advance has naturally been greatest for those items upon which the war demand has been most concentrated.

There is some evidence that the prices of real estate have fallen in recent years on the whole, although the real estate market has not been a very active one, and we have no price statistics concerning it that are comprehensive and reliable. There is no standard unit of real estate. During the last few years, it is well known, prices of securities such as stocks and bonds have likewise fallen decidedly, on the average. Real estate and securities, however, are durable income-bearers which yield their income usually over long periods of time. Their value therefore is to a large extent the capitalization of their prospective incomes at the current and prospective rates of interest. The period in question has been one in which interest rates on long-time obligations have risen very decidedly, and it is therefore natural that permanent income-bearers, like land and securities, should have their capital value greatly reduced, except in the cases of stocks where the dividends have increased more than enough to offset the decline in value that would otherwise have resulted from the advance in the current market rate of interest. In these cases, it may be said that the yardstick of value in terms of which future incomes are measured has been shortened in length, but that contemporaneously the interest rate has risen, or,

¹ National Industrial Conference Board, "Wartime Changes in the Cost of Living," *Research Report*, No. 9, Aug., 1918, p. 64.

² *Ibid.*, p. 64.

³ *Ibid.*, p. 70.

⁴ *Ibid.*, p. 35.

in other words, the present relative importance of the right to a given future income as compared with a present one of the same size has declined.

Wages

Wages, which are but one kind of prices, have also risen during this period of inflation. Unfortunately we do not have in the United States any comprehensive wage statistics for the entire country comparable with the price statistics of the Bureau of Labor Statistics. The meagre evidence that is available shows that wage advances have been very uneven, both among different occupations and within the same occupation in different parts of the country. In some districts wage advances have been much more pronounced than in others; advances for example have been especially large in the shipbuilding districts, in the neighborhood of munition factories, and near large cantonments. Some types of labor, as, for example, many kinds of metal workers, workers in textile factories and shoe factories, have received large advances in wages since the war broke out, advances of from 40 to 75 per cent having been common. For certain other types of workers the wage advances in most sections of the country have been relatively small; witness the wages of compositors and linotype operators, bakers, motormen and conductors on street railways, hod carriers, bricklayers, plasterers and steam fitters in the building trades¹—classes of laborers whose wage increases since the war broke out have normally been in the neighborhood of ten to twenty per cent.

A comparison of the prevailing wages of male farm labor in the various states for 1910 and 1917 is given in the *Monthly Crop Report* of the United States Bureau of Crop Estimates for March 1918. This comparison shows for the different geographic sections of the country the following average wage figures per month without board:

¹ See article on "Wages and the War" published in *Monthly Review* of the Bureau of Labor Statistics for March, 1918, pp. 134-136, which summarizes the results of the recent studies in this subject made by Hugh S. Hanna and W. Jett Lauck, published in their book *Wages and the War*, New York, 1918.

<i>Section</i>	<i>Average Wages per Month</i>		<i>Rate of increase per cent</i>
	<i>1910</i>	<i>1917</i>	
North Atlantic	\$33.19	\$48.06	45
South Atlantic	19.75	30.80	56
North Central east of Mississippi River ..	31.81	44.98	41
North Central west of Mississippi River ..	35.45	49.46	40
South Central	21.90	31.07	42
Far Western	46.48	63.59	37
United States	27.50	40.43	47

The results of a study of wage movements in the iron and steel industry made for the United States Bureau of Labor Statistics are summarized by the author, Mr. N. C. Adams as follows: "The average earnings per hour of employees in the principal productive occupations of six departments of the iron and steel industry had increased, in September, 1917, as compared with May, 1915, as follows: in blast furnaces, 52 per cent; in Bessemer converters, 58 per cent; in openhearth furnaces, 38 per cent; in blooming mills, 35 per cent; in plate mills, 50 per cent; and in sheet mills, 95 per cent . . . Many of the companies furnishing information for this report have notified the Bureau that they granted a further increase of ten per cent in rates of pay to their employees in October, 1917, and it is believed that all of the companies represented joined in this additional increase." ¹

The records of the New York State Industrial Commission show that for the reporting manufacturing establishments throughout New York state the average weekly earnings per employee for August of each year, 1914 to 1918, was as follows: ²

<i>Year</i>	<i>Amount</i>	<i>per cent</i>
1914	\$12.53	100
1915	12.89	103
1916	14.44	115
1917	16.44	131
1918	21.23	169

Relative wage figures for 37 occupations for the country as a whole for the period 1914-1915 to January 1918 have been

¹ *Monthly Review of the Bureau of Labor Statistics*, March, 1918, p. 29.

² "This average is obtained by dividing the total payrolls by the number of employees on the payrolls. In the computation of this average no distinction is made between men and women, nor between shop and factory office employees." *The Bulletin*, issued monthly by the New York State Industrial Commission, September, 1918, p. 271.

compiled by Messrs. Hanna and Lauck.¹ The occupation showing the smallest advance was that of compositors and linotype operators (newspapers, day), whose average advance was but six per cent, while that showing the largest advance was blacksmiths (shipyards, Delaware River) whose average advance was 105 per cent. The average advance for all 37 occupations was 42 per cent.

Very much smaller advances on the average are shown by the figures for union wage scales, covering a large group of occupations. Taking the rates for 1913 as 100, these figures show the movement of rates of wages per hour to have been as follows: ²

1913	.....	100
1914	.....	102
1915	.....	103
1916	.....	107
1917	.....	114

These last figures give results so out of harmony with the other evidence that it is doubtful whether they are fairly representative of wage movements in general throughout the country.

On the basis of the scattered evidence cited, it would appear to be a fair guess that the average increase of laboring men's wages (including agricultural labor) from 1913 to the end of 1917 was somewhere between 40 and 50 per cent, and that during the year 1918 the rate of advance has in general been more rapid than during any earlier year of the war.

If one were considering the welfare of the wage-earning class, other factors would need to be taken into account, such as the shifting of men from the lower-paid to the higher-paid occupations, the reduced amount of unemployment, opportunities for overtime, and overtime rates of pay, the employment of additional members of the family under the stress of war demands, the greater intensity of much of the work performed in time of war than in time of peace, the additional expenses of the household when the housewife is working away from home—expenses for board, laundry, care of children, transportation, etc. Here, how-

¹ *Wages and the War*. Reprinted in the March number of the *Monthly Review of the Bureau of Labor Statistics*, March, 1918, pp. 135-6. The figures as given cover 44 occupations, but for seven of the occupations the figures given are for weekly earnings and not wages per hour or piece. These seven occupations have been omitted in computing the average figure.

² *Monthly Review of the Bureau of Labor Statistics*, June, 1918, p. 146.

ever, we are concerned with the movement of wage rates themselves, and not with the broader question of the welfare of the laboring classes.

Measures taken to limit Expansion of Bank Credit

As to the general character of the situations thus depicted and their fundamental relationship to war-time finance, there can be no doubt. The committee expresses no opinion as to the general theory of what is called inflation, or as to the comparative influences of the different forces at work, but leaves the facts to speak for themselves.

Before considering the immediate fiscal results of the currency and credit changes thus reviewed, it is desirable to outline the more important measures taken for limiting the expansion of bank credit.

Very shortly after the United States became a belligerent the Federal Reserve Board undertook to urge upon the banks of the country the necessity of great conservatism in their lending operations. The policy thus decided upon was made effective in two ways, the first that of public appeals with relation to the need of economy in consumption, the second that of direct communications with the banks, both member and federal reserve. These were urged to adopt as conservative a policy as possible and to avoid the undue expansion of credit to unessential or less essential industries. Several factors combined to render this effort at the control of credit through education more or less ineffective. There are always a considerable number of industries which do not need to rely upon the banks for assistance, and since the beginning of the European War considerable additions have been made to the number of such industries, due to the fact that many lines of business have received very large returns in cash and have been able to do without the assistance of the banks. A second factor of difficulty in applying the policy of restricting credit was found in the fact that many bankers were uncertain as to the meaning to be assigned to the term *unessential* and were naturally disposed to interpret this term in accordance with the needs and requirements of their own particular communities rather than in accordance with the strict interpretation which would be given to it by those who were desirous of bringing about conditions of maximum production of goods, limitation of consumption and, as a means thereto, restriction of credit.

Again, there has undoubtedly been opposition on the part of both manufacturing and retailing interests which have been reluctant to see the development of any educational campaign having a tendency to restrict the development of their business. Although, as time has gone on, there has been a real effort by banks throughout the country to restrict the extension of credit for purposes not deemed wholly essential, there has been not a little indiscriminate lending, while the aggregate of lending of all kinds has not been as thoroughly restrained as was desirable.

The War Industries Board developed a systematic policy of rationing the industries of the country with regard to their consumption of fuel, material, labor and transportation, and this policy on their part was undoubtedly beginning to have the effect of reducing the demand for credit at banks. These substitutes for the raising of the rate of discount as a method of restraining the growth of business have, however, when taken in the aggregate, been insufficient to control expansion of credit.

During the past four years the Federal Reserve system has expanded until it now includes a very large percentage of the commercial banking houses of the country. It is therefore able to exert the same influence over the changes in the supply of credit as central banking organizations elsewhere, and it is thus able to perform a function which is of fundamental significance in connection with the financing of war or with the management of any great demand upon the banking resources of the nation. This makes a consideration of the question of discount rates under the Federal Reserve system not only a desirable, but an indispensable, adjunct to any intelligent consideration of war finance.

Since the United States became a belligerent, however, the policy of the Federal Reserve system has, as stated earlier in this report, not been that of introducing great changes into the discount rate. The question is therefore fairly raised whether the adoption of a policy of higher rates of interest and discount should not have been employed as an additional means of restricting the growth of credit. Two distinct points of view have been advocated with reference to this matter, and in behalf of both something at least may fairly be said by way of argument. Had the Federal Reserve banks at the beginning of the war adopted a policy of advancing their rates of discount in a degree which would effectively have curtailed the current demands for commercial credit, they would have materially advanced the general rate of return

on investments in the open market. An indirect result of this action would have been to reduce the value of securities of various kinds. As this tendency to declining prices of securities was already marked, the action of the system would undoubtedly have aggravated a drift which was already rather serious, and this might have been complicated by the growth of a certain uneasiness in the minds of the public concerning the probable future of interest rates and investment values. The savings banks in particular, which hold large volumes of long-time securities, would have been unfavorably affected. As has already been noted, moreover, the advance in rates of discount would not have directly exerted an important control over those lines of business which are not immediately dependent upon banks, but which rely upon cash collections from sales of goods or payment of services to carry on their ordinary operations.

In answer to this statement of the case, however, it may be pointed out that an advance in rates of discount, however alarming and suggestive of possible difficulty it might have been, was really a form of warning to the public which was essentially due and which it was only fair to supply. The maintenance of a low rate of discount undoubtedly had its effect in many directions in leading the business world at large to feel that conditions were really better than was actually the case. On the other hand, the adoption of a policy of higher rates of discount must unquestionably have had the effect of affording a strong element of co-operation with the policy of rationing or limitation of supplies of material. Most important of all is probably the fact that it would have directly discouraged member banks from presenting for re-discount paper based on government securities which, with rates as they have been, they were disposed to bring to Federal Reserve banks for conversion into reserve credits. In this same connection attention should again be given to the fact that the policy of the Federal Reserve system has been uniformly that of governing its rates of discount by reference to the rates fixed on public securities. This policy has had an unexpected result in that it has enabled the business public to obtain loans upon notes collateralized by government securities which they would otherwise not have been able to obtain at all or for which they would have paid a materially higher rate. The effect of this policy on the part of the banks has been that of gradually shifting loans collateralized by government securities to Reserve banks, while they

have retained in their own portfolios the genuine commercial paper growing out of transactions, which has been discounted with them. Conditions thus produced necessarily impair the liquid character of the banks, as can be seen by the fact that the proportion of war paper held by the Reserve banks has risen in some cases to a point representing three-quarters of their total assets, while taking all Reserve banks in the aggregate, it represents probably one-half of the total.

Effects on the Treasury

An important effect of the conditions and policies thus sketched has been that they compelled the government to pay prices higher than would otherwise be necessary for its equipment and supplies; and wages higher than would otherwise be necessary for much of its labor. In time of war there is a heavy concentration of the country's economic demand upon the types of goods most needed for military purposes, and it is to be expected that under the pressure of this increased demand the prices of such goods, as well as of the raw materials and types of labor that enter largely into their manufacture, should advance substantially; and that if there is a contemporaneous upward movement of general prices, the prices of these war essentials should on the whole rise higher than would the general price level. What proportion of the advance of war prices over peace prices of the equipment, supplies and labor which the government has bought since its entrance into the war has been due to currency and credit expansion and what proportion has been due to the concentration of war demands on war essentials it is impossible to say. When one bears in mind, however, that the average increase in the wholesale prices of approximately three hundred commodities—most of them being in no considerable degree war essentials—has been doubled since the outbreak of the war, and when one notes that large advances have taken place in the entire list he will see that the presumption is strong that a substantial percentage of the advance of war prices over peace prices of the goods which the government is buying has been due to expansion of currency and credit. This percentage computed on the enormous sums the government has spent for equipment and supplies would yield a very large figure. This means that to obtain a given supply of goods the government must raise much more money by taxes and loans than would otherwise be necessary.

Under present conditions, the government receives for the bonds it sells a currency of low purchasing power. Now that the war is virtually over, there will probably occur a gradual reduction of our currency and credit supply, with the result that the Liberty bonds will be repaid, principal and interest, in a currency of higher purchasing power than the government borrowed. It will presumably be a more valuable dollar that the government will use to liquidate these bonds. This more valuable dollar it will obtain chiefly through taxes and if it should happen, as it did after our Civil War, that the burden of federal taxes should fall largely upon other shoulders than those of the bond holders, there would be a grave injustice. If, however, the taxes for liquidating the bonds should be paid largely by the holders of the bonds and roughly in proportion to their holdings no such injustice would take place. In that case the bondholder would pay the government as a taxpayer the same dollars he would receive from the government as a bondholder.

In all those government positions in which salaries are relatively fixed, either there are imposed inequitable financial burdens upon the incumbents or there results a decline in the quality of men holding the positions. A time of war when the demands upon the government are unusually heavy is usually a time when any substantial advance in salaries is difficult for the civil list of the government to obtain; and this is particularly true of the higher officials. At such a time the government is conserving its funds for military purposes and is naturally reluctant to increase the salaries of civilian employees; while under conditions of war stress civilian employees are reluctant to ask for salary increases. With a rapidly mounting cost of living, however, they suffer if their salaries are not substantially advanced. Furthermore, advancing salaries in non-government positions are a continual temptation for men to leave the government service.

During the present war it is doubtful if many positions in the civil list, with the possible exception of stenographers and typists, have had their salaries advanced in any degree commensurable with the advance in the cost of living. It is true that civilian clerks and officials of the government should bear their full share of the war's financial burdens; but it appears probable that the salaries of the government's civil list were among the worst laggards in the race with the rising cost of living, and that during the recent war, as during the Civil War, these people were

called upon to bear a disproportionately heavy share of the burden. Outside of the civil list, as for example in munition plants, shipbuilding establishments and railroads, the government adopted a more liberal policy in the matter of wages, allowing frequent increases as the cost of living rose.

Such meagre evidence as is available concerning the movements of wages and the cost of living in Europe since the outbreak of the European war seems to tell the same story, namely, that under conditions of inflated currency and credit, wages on the whole have lagged behind the cost of living in their upward movement.¹

The evidence on this subject for the United States since 1913 has already been discussed. Although scanty and somewhat contradictory, it shows that in some industries wages have risen to extravagant figures, and in others but very little. On the whole, however, it seems to support the conclusion that average wages throughout the United States have not risen as rapidly as has the cost of living. But whether this is true or not for that intangible thing "average wages," it is certainly true of the wages of many millions of workers. This situation was conducive to discontent among such workers, and to labor difficulties, which reduced the efficiency of labor and made more difficult and more expensive the government's task of securing promptly an adequate supply of war essentials.

We doubt whether the war could have been successfully financed without incidental changes in the volume of currency and credit and in prices. Rising prices were an effective means of curtailing the consumption of non-essentials on the part of millions of people and of thereby releasing labor and capital for war essentials, before economies in consumption could be enforced by thrift campaigns, increased taxes, rationing and preferential rights as regards transportation, fuel and credit. But although perhaps necessary to some degree, in a great war, these changes during the recent war appear to have been excessive and to have had inequitable results.

¹ Cf. M. Huber et L. Dugé de Bernouville, "Le mouvement des prix, du coût de la vie et des salaires en divers pays, de juillet 1914 à janvier 1918." *Bulletin de la Statistique Générale de la France*, April, 1918, pp. 247-28.

Remedial Measures

We may now consider possible measures for restoring normal currency and banking conditions. To that end the committee makes the following suggestions:

(1) It is advisable for the Federal Reserve authorities to follow a less liberal policy in the future than they have been following recently in the matter of rediscounts and collateral loans for member banks. The committee believes that the low discount rates and the low rates for short-term collateral loans which the Federal Reserve banks have been offering to member banks have unduly encouraged deposit currency expansion on the part of member banks.

These rates, which the committee believes are lower than the present conditions of the market justify, have in no small degree assisted the recent upward movement in loans and discounts of the Federal Reserve banks and the resulting large increase in Federal Reserve bank deposits and net issues of Federal Reserve notes. These deposits in Federal Reserve banks represent the legal reserve basis for an expansion of loans and of deposit currency on the part of member banks. This credit expansion appears to the committee to have been in excess of trade needs, and in excess of what would have occurred had the loan and discount rates of the Federal Reserve banks been maintained at levels more closely in harmony with market rates of interest. The Federal Reserve authorities have kept the rates of interest down by permitting, at low rates of discount, a large expansion of bank credit. If market interest rates are artificially kept down by a policy that puts commodity prices up, the man who borrows money obviously needs to borrow more than he otherwise would in order to buy the same supply of goods. In other words, he gets dollars of a lower purchasing power and therefore needs more of them. The committee believes that the country has been paying for its nominally low interest rates in unduly high prices and that one remedy is for the Federal Reserve banks to advance their discount rates and in other ways to be less liberal in their loan and discount policy. Such a change in the policy of federal reserve banks would tend to restrict credit expansion on the part of member banks.

(2) A second remedial measure, and one that is to a large extent corollary to the one just mentioned, is the exercise of greater effort to discourage the "borrow and buy" policy in the

matter of Liberty bonds, in so far as borrowing to buy does not involve immediate economies in consumption or economies in consumption in the near future through the anticipation of income soon to be realized—economies that will presumably pay off the debt within a short period of time. The man who borrows to buy Liberty bonds, and carries the bonds indefinitely by means of bank loans renders very little service to the nation. He gives funds to the government that the bank itself could as well have given directly, and does nothing to make available to the government the supplies, the need for which is the *raison d'être* of the government's borrowing. Our second year of belligerency showed an exceedingly rapid increase in the amount of the government debt held by banks either in the form of direct investment or as collateral for loans. Loans incurred for the purchase of Liberty bonds and not paid within a reasonable time should have their rates of interest advanced progressively above the rates originally charged. Every effort should be made to encourage the policy of economizing to buy, in contrast to that of borrowing to buy.

(3) If the Treasury is to continue to endeavor to meet its requirements by recourse to anticipatory borrowing through the issue of Treasury certificates of indebtedness, it should limit its borrowings in this form to the lowest possible figure by requiring the holding of legal reserves against government deposits and by initiating a more rigid discount policy. This mode of short-term financing, conveniently described as certificate borrowing, has been utilized by the Treasury to an increasing extent from our formal entry into the war up to the present time of writing. It has consisted of the issue of negotiable short-term obligations taken by the financial institutions of the country and to a limited extent by investors, and paid for by the creation of additional bank credit in the form of government deposits, such deposits being thereafter drawn upon and dispersed in the course of public expenditure and ultimately taking the form of additional commercial deposits and enlarged deposit currency circulation. The certificates of indebtedness have eventually been used in payment of subscriptions made by or through the banks to a succeeding Liberty loan or have been liquidated or redeemed from out the proceeds of such loan.

Certificate borrowing has made it possible for the Treasury to supply its fiscal requirements with great ease and with reason-

able, although not maximum, economy. But, on the other hand, it has involved the creation of a huge volume of additional bank credit without corresponding contraction or deflation incident to the liquidation or funding of the certificate issues.¹

(4) The evil consequences of a large expansion of credit accompanied by the placing of government loans with banks cannot be overlooked and it is urgent that at the earliest moment they should be eliminated. The question how this can be done has received the attention of the committee. We are of the opinion that the process of war financing by means of large issues of certificates which are placed with banks and are carried by the latter until they can be funded into long-term bonds, which in turn are purchased by investors on the strength of bank credit extended to them by the very institutions which at first took up the certificates, should be brought to an end. The effort should henceforth be that of transferring as rapidly as possible to private ownership the great holdings of certificates and bonds which are now carried by the banks in one form or another. The practical methods of bring this condition of affairs to pass will, we think, be found in a steady reduction of the war paper to be carried by the reserve banks. In the past a serious evil has perhaps been found in the circumstance that a commercial bank could always be sure of passing on its war paper to a reserve bank without any penalty in the form of a higher rate of interest and sometimes at a profit. In consequence the portfolios of Reserve banks have become clogged with such paper and it has risen in some instances to between seventy and eighty per cent of the total holdings of paper in the hands of such institutions. Fortunately, these advances have been made upon short time and there are no long commitments for the future.

(5) The committee had noticed with apprehension the increasing agitation in certain quarters in favor of stimulating gold production by means of a government bounty or some other form of government aid. Without entering into a discussion of the various phases of this subject, the committee wishes to register its emphatic opinion that the attempt by a government bounty to stimulate the production of gold at a time like the present, when, through the wide extension of the use of paper money and deposit currency, through the increasingly efficient use of gold in bank

¹ Compare Hollander, *War Borrowing: A Study of Treasury Certificates of Indebtedness of The United States*, chap. v.

reserves, and through other influences, the purchasing power of gold has been practically cut in half during a period of four years, would be both unsound economics and unsound public policy. The plan amounts to a proposal to tax the people to provide bounties for stimulating an industry whose stimulation would raise still higher the high cost of living from which these same people are at present suffering. It would artificially enlarge the base of our credit structure with inevitably bad results. There is no reason to believe that the new supplies of gold whose production would be stimulated by a bounty would not be used as the present ones are being used, namely, chiefly as bank reserves for a continually rising structure of circulating credit, a structure that for some time has been rising with abnormal rapidity. The gold bounty, moreover, even if granted, would probably fail to accomplish its purpose. If the bounty should stimulate gold production, the increased gold production in raising the general price level would raise the prices of machinery, supplies and labor used by the gold-mining concerns; and these advances in prices would in turn lead to demands for additional bounties to cover rising expenses and so forth *ad infinitum*.

(6) The committee refers particularly to the advisability of terminating at the earliest possible moment the gold embargo and the control of international exchange which have been features of our war emergency work. Were we to remove the gold embargo to-day the amounts for which foreign countries could draw upon us would be small. Perhaps a hundred millions could be drawn by South America and perhaps as much or more by the Orient. If a total of three hundred millions should be drawn from the United States, it would be far more than most students of the subject expect, while in all probability the act of removing the embargo would in most cases destroy the disposition of foreign countries to take advantage of the freedom offered to them. We are the holders of more than eight billions of government securities, the interest and principal of which must eventually be paid in some form; while during the war we have paid a very large fraction of our pre-war indebtedness. The remaining fraction is more than offset by the claims upon foreign enterprises which have been sent to us in payment for the goods we have shipped abroad. We are therefore out of debt on private account and very large creditors of the rest of the world on public account. We control to-day from one-fourth to one-third of the

available gold supply of the world. The re-establishment of a free international market for gold and the opening of a satisfactory basis for trading in foreign exchange is now an essential basis for the restoration of normal commercial relations with foreign countries.

In some respects the problems of the United States and Great Britain are on these subjects similar. For while England has parted freely with her gold when goods were needed, the United States has encountered very much the same problem of currency and credit expansion that has had to be settled in England. The close of the war finds the credit and currency systems of both countries unduly expanded and for similar reasons. Despite the great abundance of gold in the United States the danger of over-expansion is present in this country, just as it is in Great Britain, because of the non-liquid character of the assets of the banks that have been used for the purpose of building up a great structure of purchasing power which continues in existence and in no wise provides the means for its own curtailment or liquidation. We should like in closing to call attention to the recent report of the British commission, headed by Lord Cunliffe, on the subject of currency and foreign exchanges after the war, and would commend this to the attention of American readers as being in many respects applicable to the problems which we must meet in the United States.¹

¹ "16. If a sound monetary position is to be re-established and the gold standard to be effectively maintained it is in our judgment essential that government borrowings should cease at the earliest possible moment after the war. A large part of the credit expansion arises, as we have shown, from the fact that the expenditure of the government during the war has exceeded the amounts which they have been able to raise by taxation or by loans from the actual savings of the people. They have been obliged, therefore, to obtain money through the creation of credits by the Bank of England and by the joint-stock banks, with the result that the growth of purchasing power has exceeded that of purchasable goods and services." *First Interim Report of the Committee on Currency and Foreign Exchanges after the War*, London, 1918 (Cd. 9182).

VI

SUMMARY

The conclusions of the above report may be summarized as follows. In financing the present war the laudable effort was made from the very beginning to secure as large a revenue as possible from taxation. This effort, which resulted in defraying from taxation about one-quarter of the war outlays (inclusive of loans to the Allies), involved exceedingly heavy burdens. The chief element in the system consisted of direct taxes which, in the shape of income and excess-profits taxes, yielded in 1918 well nigh three-quarters of the tax revenue.

1. *Income and excess-profits taxes.* Dealing first with the income tax, it is to be noted that the act of 1917 provided for a structure of great complications, some of which are removed in the new House bill. A number of improvements, however, remain to be made, among which the following—a few of them now incorporated into the bill just reported by the Senate Committee on Finance—are deserving of mention. There should be only a single rate for the normal income tax, discrimination between larger and smaller incomes being made only in connection with the super-tax. The definition of taxable income is susceptible of further improvements. Taxpayers should be permitted to deduct losses sustained in any transaction entered into for profit, even though such a transaction is not connected with any trade or business. The arbitrary limitation hitherto imposed on corporations in respect to deductions allowed for interest on debt ought to be removed. The proceeds of life-insurance policies paid to the estate of a decedent should be excluded. More adequate provision should be made for the amortization of plants acquired since the outbreak of the war and for the shrinkage on the value of inventories after the war. Corporations should be permitted to deduct all dividends received from the stocks of other taxable corporations. If stock dividends are to be taxed as income, the existing method of taxing them should be so changed as to provide for the taxation

of only the difference between the value of the shares held by the stockholder after the declaration of the dividend and the price paid for his original shares of stock. The exemption of interest upon state and municipal obligations should be abolished. While it would have been desirable to apply the same principle to federal securities, the only practicable remedy at present in this respect is to alter the provisions affecting the permissible debt deduction for income from non-taxable securities. Finally, the extremely high rates of the super-tax, especially when combined with the excess-profits tax have, in not a few cases, produced undoubted hardship.

The excess-profits tax has proved a great fiscal success, which is due, however, in large degree to the skill and good judgment of the internal revenue department in administering the act and to the loyalty of the taxpayers in complying as best they could with a crude, obscure and, in many ways, harsh and unequal measure. The law undertook to levy the tax at rates varying with the percentage which the taxable income bears to the invested capital. Statistics show, as might have been expected, that the tax collected bore no necessary relation to war profits and imposed much heavier rates upon small, than upon large, concerns. This led the Treasury Department to suggest the alternative scheme, which added a war-profits tax to the excess-profits tax. The result of such an alternative method may indeed reduce the number of cases of erratic workings of the tax, but will greatly complicate the law and increase the cost of administration. Great difficulties have been encountered in administering the present law in defining invested capital, especially in connection with capital invested in non-taxable securities, in the case of borrowed capital, in cases where corporations had issued stock for the purchase of tangible property, in connection with value of good will, and in the provision made for patents and copyrights. In the definition of income, also, several difficulties have arisen, especially in connection with the limitation of deductions on account of salaries actually paid; in the case of profits which fluctuate from year to year; in the case of industries carried on with different degrees of risk and different degrees of stability; and in the case of net income in excess of the specific exemptions. Other great difficulties appeared in connection with the determination of nominal capital. In fact, had it not been for the administrative discretion exercised by the internal revenue department which went to the extreme limit, and perhaps even transcended

the limit, in interpreting the law, the results would have been far more unsatisfactory than was actually the case. The greatest desideratum in the law, if it is to be continued, is the need of simplification. The ordinary citizen cannot understand it, and in many of the difficult questions which arise cannot get very good advice from the average lawyer, accountant or local internal revenue official. If a tax on business profits is to be continued at all after the war, Congress should discard the cumbersome and complicated paraphernalia of the present law and levy a simple tax upon the net income derived from business enterprise.

While from the fiscal point of view the excess-profits tax has been conspicuously successful, the industrial effects must not be overlooked. It is too early at the present time to reach a final conclusion, but the investigation of the committee resting upon an analysis of data covering over four hundred representative concerns seems to point to the following conclusion. If we divide businesses into those that have expanded during the war and those that have not expanded, a real problem arises in the case of the former category. Those that have expanded slightly or have managed to expand without greatly increasing their plant or merchandise are in relatively the best position. On the other hand, not a few concerns which have expanded greatly and which have accumulated a large proportion of tangible assets are in a highly unsatisfactory condition. Book profits, in times of expansion and inflation, are not the same as realized profits. A business which expands its operation materially may find that a large part of its war profits will be needed to finance its expanded business, while it may also be obliged to borrow considerable sums. If its earnings are large and are not absorbed by excessive taxation, it may reasonably expect to pay its loans, provide for a possible shrinkage of its tangible assets, and ultimately realize its war profits. Expansion has its hazards, one of the most important of which is taxation. It is by no means improbable that in not a few cases our income and excess-profits taxes are imposed upon income that can never be realized and upon profit that will yet turn into loss. In any case, it is certain that the return of peace makes it necessary for Congress to consider carefully the effects of revenue legislation upon the readjustments which now seem to lie ahead of American industry.

2. *Consumption and other indirect taxes.* During the Civil War the greater part of our tax revenue was derived from con-

sumption and other indirect taxes. In the present war the situation, as we have pointed out, has been reversed, a little less than one-quarter of the entire tax revenue in 1918 being derived from consumption and other indirect taxes. The House realized that this was too low a proportion and in the new bill prepared before the cessation of hostilities, these taxes were so increased that despite a considerable rise in the rates of income and excess-profits taxes, at least thirty per cent of the total tax revenue would be derived from consumption taxes. This proposal was in harmony with approved fiscal theory. For while the great advantage of the so-called direct taxes on property or income is that they present an opportunity for the distribution of the burden with some approximation to ability to pay, taxes on consumption also possess an advantage in that they afford the best means of getting at the tax-paying capacity of people individually possessing property or income in amounts too small to be effectively reached by property or income taxation, but into whose hands in the aggregate pass the greater part of the national income. While they are undoubtedly regressive in character when taken by themselves, consumption taxes, when combined with property and progressive income taxes, constitute a desirable element in a well-balanced tax system. They cannot be regarded as unduly burdensome if levied, not on necessities, but on comforts or on articles the consumption of which can be curtailed without injury or even with benefit. Their influence in discouraging harmful consumption is, in fact, an additional point in their favor. In view of the considerations adduced in the last section, it is even questionable as to whether still more reliance might not well have been placed upon consumption taxes.

The situation has, however, been completely changed and twice changed during the past few weeks. In the first place, the cessation of hostilities has so reduced the need of revenue that in all probability the desirable proportion of tax revenue to be yielded by consumption and other indirect taxes might have been secured from taxes on liquor and tobacco at the higher rates suggested in the House bill, together possibly with the tax on gasoline and the license taxes on motor cars. This would yield about one-third of the entire tax revenue—a not excessive figure.

The possibility, however, of the adoption of prohibition before long involves a loss of over a billion dollars in the estimated

revenue, under the rates proposed in the House bill. If prohibition is adopted, it will probably render necessary an increased tax on tobacco as well as taxes on the so-called food luxuries, such as tea, coffee and cocoa, together possibly with an increased tax on sugar. But even these changes would be inadequate to fill the gap and there would be presented the important problem of whether the loss of revenue from the taxation of liquors should be met by direct taxes or whether resort should be had to an extension of taxes on transactions and on such commodities as might fairly be classed in the category of comforts and luxuries. The fiscal aspects of prohibition are not to be overlooked.

3. *Land and property taxes.* Had the war continued there is little doubt but that the project of raising additional revenue from land and other property taxes would have been vigorously pushed. The necessity of a constitutional amendment would, however, in any case have prevented their speedy utilization. The chief problems that now remain are the desirability of adding land and capital taxes to our annual sources of federal revenue and the utilization of the so-called capital levy to reduce or to extinguish the war debt. Although there is a strong presumption against federal land and capital taxes on account of their interference with the state and local tax systems, the committee has not been able to give this subject sufficient study to permit it to express an unqualified conclusion. With reference, however, to the so-called capital levy, that is, a single levy laid once and for all upon property, and of an amount too great to be paid conveniently from current income, the arguments seem to be overwhelmingly against the proposition in this country. Entirely apart from the administrative or constitutional difficulties involved, the effect upon business might be disastrous, the penalty upon savings would be undoubted, the tendency to foster extravagance of public expenditures would be probable, and the existence of the tax-exempt bonds would produce the greatest inequality. For a nation in the present position of the United States, consequently, such a measure as the so-called capital levy has no proper place in any fiscal plan. As an alternative for repudiation in a country on the verge of bankruptcy, something can be said for the project. For a nation solvent and unembarrassed, it holds no attraction.

4. *Public credit.* It is unnecessary to defend the use made in our war finance of public credit. In view of the gigantic ex-

penditures of the war, there was not a choice between loans and taxes. It was necessary, at the very outset, to make use of credit on a hitherto unknown scale. While the United States undoubtedly acted wisely in raising as much as possible from taxation, it remains true that the greater part of war expenditures has been defrayed, and necessarily so, from loans.

A conspicuous feature of our war finance has been the anticipatory loans, *i. e.*, the use of Treasury certificates of indebtedness issued in anticipation of the proceeds of the Liberty loans and taxes. Some phases of this method of financing are to be criticised. It has been more costly than the Liberty loans. It has necessitated the renewal and extension of short-time loans so far as the maturities of one cycle have overlapped the issues of another. Above all, since it took the form very largely of credit advances made by the banks, it has added largely to the inflation of credit which it has been the avowed policy of the Treasury to prevent.

So far as the Liberty loans are concerned, the government is to be commended for resorting neither to annuities nor to serial bonds which, however desirable in local finance, are unsuited to federal war finance. Three out of the four loans have taken the form of limited-option bonds the advantages of which are undoubted, but the corresponding disadvantages of which have somewhat been overlooked. The chief points on which criticism may possibly be urged against the Treasury are three. First, the rate of interest was kept below the market rate not only by an appeal to patriotism but by what amounted, in part at least, to some measure of compulsion. It is questionable whether the Treasury would have been able to persist in this policy if the war had continued. Secondly, with reference to the terms of payment, the present debt is not well arranged for a policy of energetic debt reduction. The best time to undertake debt payment is shortly after the cessation of a war, when the revenues from taxation are large, when industry is adjusted to war taxes, and when expenditures for war have stopped. This criticism, however, may be in part weakened by the flotation of the fifth Liberty loan in the spring of 1919. If, as now seems possible, the new loan will consist largely of short-time bonds running for three, five, and eight years, the unduly long period of non-payment in the present bonds will be corrected and the debt will be brought under earlier control of the Treasury.

The third criticism to be urged against the loan programme of

the government consists in the exemption of the bonds from the normal income tax. The purpose of the exemption was avowedly to make the bonds more attractive and thus to permit their flotation at a lower rate of interest. If at any time they should fall below par it was thought that it would be possible, by raising the rate of the normal income tax, to bring their value up again. Such a method, however, is both uncertain and expensive. Still less justifiable from the fiscal point of view has been the exemption of state and local bonds. In addition to raising the money, the policy of the Treasury has been as far as possible to place the bonds permanently in the hands of the investor. This purpose has been only partially successful, as is proved by the invariable decline of the market price of the bonds after each issue. Moreover, the banks were virtually compelled to subscribe largely, especially in the second and third Liberty loans. In some respects the most important task ahead of the Treasury is to accustom the American people to individual investment in government bonds. To what extent the further issues of bonds will make an appeal to the average investor at the present rate of interest paid upon them is a matter of considerable doubt.

5. *The fiscal aspects of currency and bank credit.* The fundamental question here is that of using the banking system in connection with public finance in such a way as to disturb prices as little as possible. During the war very considerable changes in both prices and wages have occurred and there is reason to think that the method of financing employed by the government has had an important share in bringing about these alterations. That some changes in prices and wages were inevitable has been the general experience in past wars, since such changes are due in no small measure to the dislocation in the conditions of demand and supply—the increasing demand for many kinds of commodities for war purposes and the decrease, or the rising cost, in the supply due to the diminution of the labor force. But it is also indubitable that another cause of difficulty is to be found on the side of currency and bank credit. A review of the facts shows notable changes in the volume of currency and bank credit, as well as a considerable rise in prices since 1913, accompanied, however, by a fall in the value of real estate and securities. In the case of wages there has also been a general rise. Although the facts at our disposal do not enable us to state with precision

whether, or to what extent, the rise in wages has kept pace with the rise in prices, the evidence seems to throw considerable doubt on the equivalence.

The double problem that presents itself is the influence of high prices on the government, and the influence of the government on high prices. To mention the latter point first, it is to be noted that the Federal Reserve Board did indeed from the very outset take some steps to limit the expansion of bank credit. Public appeals were made to induce economy in consumption, and the banks were urged to adopt as conservative a policy as possible to avoid the undue provision of credit to the unessential industries. The government gradually developed a systematic policy of rationing the industries of the country with regard to material, labor, fuel and transportation, with the object, among other things, of reducing the need of bank credit. Finally, the Capital Issues Committee and the Finance Corporation were undoubtedly of influence.

All these methods, however, were of slight consequence when compared to certain acts both of commission and of omission. Among the former is to be classed the system of anticipatory loans through the issue of temporary certificates, as well as the inducement to the "borrow-and-buy" policy in connection with the Liberty loans. Among the acts of omission the chief is the failure to put into operation an effective discount policy. While good arguments may be presented on both sides of the question, the failure to increase discount rates, whatever its ancillary advantages may have been, contributed in no small measure to the rise in the general price level.

While the government action thus affected prices, the effects of high war prices on the Treasury are equally undoubted. They compel the government to pay more for its equipment and supplies than would otherwise be the case. The government receives for the bonds which it sells a currency of low purchasing power while the bonds will ultimately be paid in a currency of high purchasing power. Where government salaries are relatively fixed, the rise of prices imposes inequitable burdens upon the incumbents or leads to a decline in the quality of the men holding the positions. The evils of rising prices on the community at large are too well known to need recapitulation.

While currency and credit expansion has been to some extent unavoidable, it has probably been greater than necessary. To

prevent further aggravation of this condition during the post-bellum period, the following suggestions deserve consideration. The Federal Reserve authorities should follow a less liberal policy in the matter of rediscount and collateral loans for member banks. A greater effort should be made to discourage the "borrow and buy" policy in the matter of Liberty bonds in so far as borrowing to buy does not involve immediate economies of consumption. Recourse to anticipatory borrowing by the issue of Treasury certificates of indebtedness should be avoided. The gold embargo should be terminated and, with the re-establishment of a free international market for gold, the control of international exchange should be abandoned. Finally, the plan of stimulating gold production by means of some form of government aid is to be deprecated.

All of which is respectfully submitted:

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